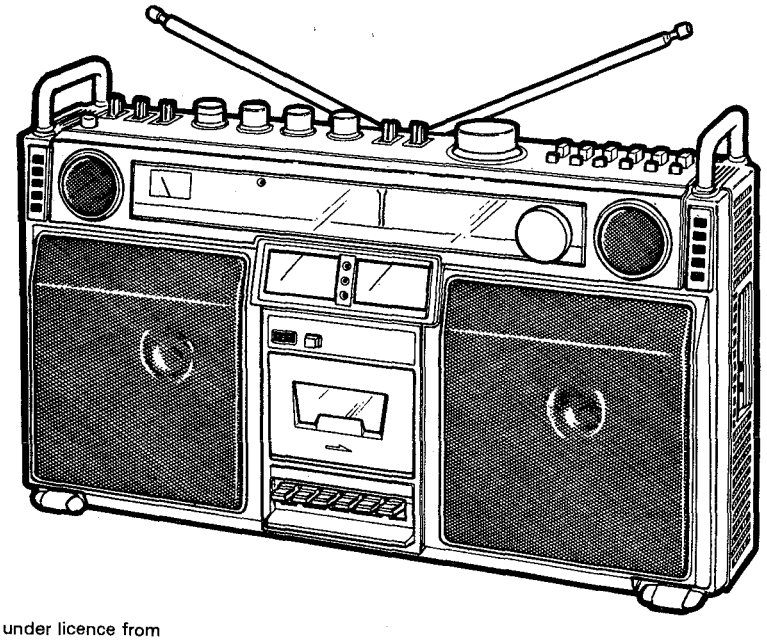
SERVICE MANUAL

CROWN JAPAN

CSC-980 SERIES

CSC-980F (X), 980L (E), L (UK), L (GE), L (FR)



DOLBY SYSTEM

Noise reduction circuit made under licence from Dolby Laboratories.

Portable Type Stereo Cassette Tape Recorder with 4-Band Radio.

SPECIFICATIONS

■ RADIO SECTION		980F (X)		980L(E), (UK), (GE) (FR)
Frequency Range	FM:	88~108 MHz	FM:	88~108 MHz
	SW2:	7.5~21.5 MHz	SW:	6~18 MHz
	SW1:	2.5~7.5 MHz	MW:	510~1605 kHz
	MW:	510~1605 kHz	LW:	150~300 kHz
Usable Sensitivity	FM:	4 μV	FM:	4 μV
	SW2:	50 μV	SW:	50 μV
	SW1:	450 μV/m	MW:	500 μV/m
	MW:	500 μV/m	LW:	1200 μV/m
IF	AM:	455 kHz	AM:	455 kHz L(E), L(FR) 460 kHz L(GE) 470 kHz L(UK)
	FM:	10.7 MHz	FM:	10.7 MHz
MPX Separation	FM:	25 dB		
Frequency Response	FM:	100 Hz~10 kHz±6 dB		
	MW:	100 Hz~2.5 kHz±6 dB		

■ TAPE RECORDER SECTION

Recording System	AC Bias, 4-track 2-channel, Stereo
Erase System	AC Erase
Tape Speed	4.75 cm/sec. +3/−2%
Wow and Flutter	0.17% (Play, JIS WRMS)
Output Power	5.0W×2 (10% T.H.D.) AC

■ OTHER SECTION

Power Source	AC:	110/200/240, F(X) 220V L(E), L(GE), L(FR) 240V L(UK)
	DC:	13.5V (UM-1)×9
Dimension		599(W)×353(H)×145(D) mm
Weight		7 kg

CROWN RADIO CORP. JAPAN

TOKYO · OSAKA · SAN FRANCISCO · PANAMA · DÜSSELFORF · LONDON

DISASSEMBLY

1. Removal of Front Cabinet

1) Remove the 8 screws (1 through 8) shown in Fig. A.
2) Pull and remove the tuning knob.
3) Depress the eject button.

Note: When removing the front cabinet, be careful not to damage the speaker lead and antenna lead.

2. Removal of Mechanism

Remove the 3 screws (1 through 3) shown in Fig. B.

3. Removal of Amp, Tuner Board and Chassis

1) Remove the mechanism.
2) Pull and remove the knobs (Volume knob, Rec Volume knob, Bass knob, Treble knob, Balance knob).
3) Remove the 8 screws (4 through 11) shown in Fig. B.

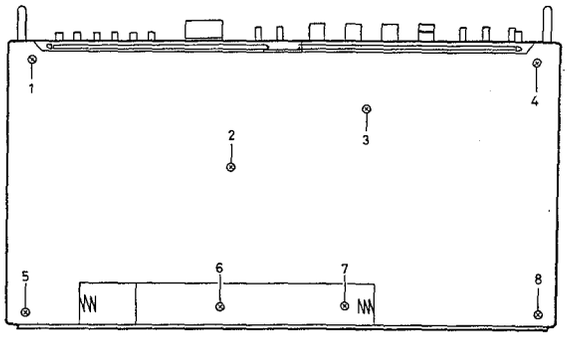


Fig. A

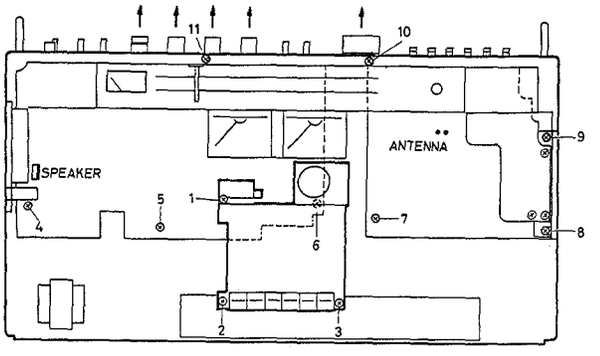


Fig. B

4. Dial Cord Stringing View

1) Insert both ends of the dial cord into the grommet. Tie the ends together sot that a loop is formed. Secure the dial cord by crashing the grommet. Thread the dial cord throught the coil spring.
2) Arrange the dial cord in the numerical order while holding one end of the cord, then engage the coil spring as shown.

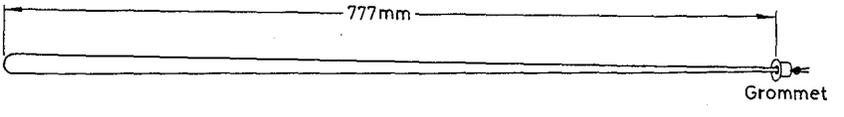
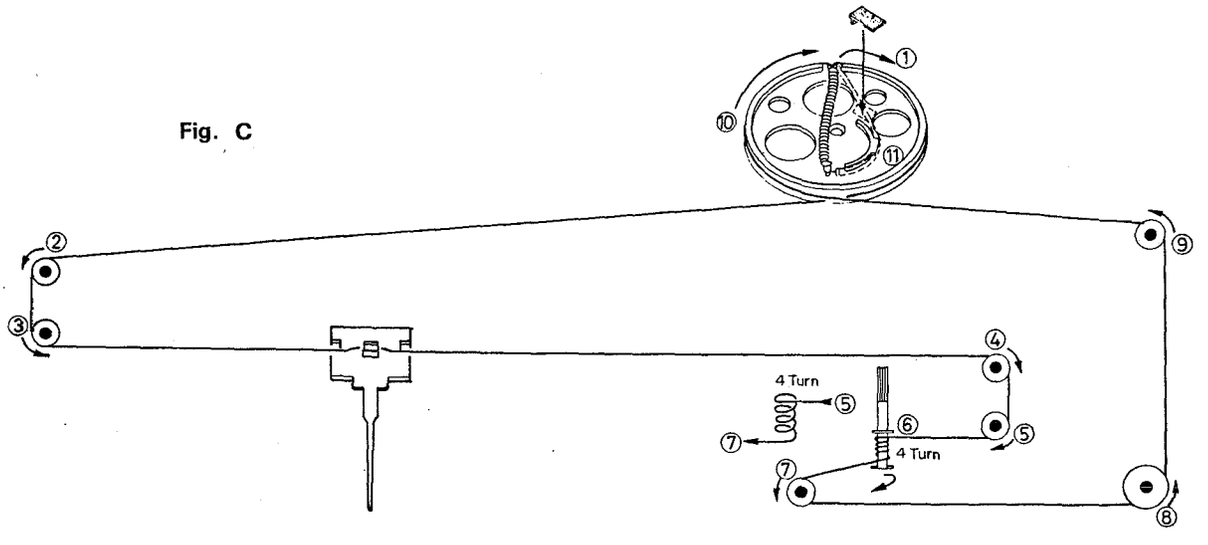


Fig. C



ELECTRICAL ADJUSTMENT

1. AM Alignment CSC-980F (X)

Adjustment	Equipment Connection	Step No.	Generator Frequency	Tuning	Location to be Adjusted
IF	● AM Signal generator ● Sweep/marker generator ● Oscilloscope ● AC voltmeter ● Loop antenna ● Load resistance ● Dummy antenna ● Frequency counter Connect measuring instruments as shown in Fig. 1 and 2.	1	455 kHz (Mod.)		AM, IFT-2, 3, 4 Adjustment for maximum. Fig. 1.
		2	Repeat Steps to obtain Maximum Output.		
MW Band		3	505 kHz (Mod.)	505 kHz	Set generator frequency to 505 kHz with L-9 (MW oscillator coil). Fig. 2.
		4	1650 kHz (Mod.)	1650 kHz	Set generator frequency to 1650 kHz with TC-3 (Trimmer condenser).
		5	Repeat Steps 3 and 4 two or three times to adjust f. cover.		
MW Tracking		6	610 kHz (Mod.)	610 kHz	Adjust L-12 (Bar antenna) to obtain maximum sensitivity. Fig. 2.
		7	1400 kHz (Mod.)	1400 kHz	Adjust TC-6 (Trimmer condenser) so to obtain maximum sensitivity.
		8	Repeat Steps 6 and 7 two or three times to obtain maximum sensitivity.		
SW1 Band		9	2.4 MHz (Mod.)	2.4 MHz	Set generator frequency to 2.4 MHz with L-8 (SW1 oscillator coil).
		10	7.6 MHz (Mod.)	7.6 MHz	Set generator frequency to 7.6 MHz with TC-2 (Trimmer condenser).
		11	Repeat Steps 9 and 10 two or three times to adjust f. cover.		
SW1 Tracking		12	3.2 MHz (Mod.)	3.2 MHz	Adjust L-11 (Bar antenna) to obtain maximum sensitivity.
		13	6.8 MHz (Mod.)	6.8 MHz	Adjust TC-5 (Trimmer condenser) so as to obtain maximum sensitivity.
		14	Repeat Steps 12 and 13 two or three times to obtain maximum sensitivity.		
SW2 Band		15	7.3 MHz (Mod.)	7.3 MHz	Set generator frequency to 7.3 MHz with L-7 (SW2 oscillator coil).
		16	22 MHz (Mod.)	22 MHz	Set generator frequency to 22 MHz with TC-1 (Trimmer condenser).
		17	Repeat Steps 15 and 16 two or three times to adjust f. cover.		
SW2 Tracking		18	9 MHz (Mod.)	9 MHz	Adjust L-10 (Antenna Coil) to obtain maximum sensitivity.
		19	20 MHz (Mod.)	20 MHz	Adjust TC-4 (Trimmer condenser) so to obtain maximum sensitivity.
		20	Repeat Steps 18 and 19 two or three times to obtain maximum sensitivity.		

○ Set the internal modulation signal generator to 30%, 400 Hz.
○ Use only nonmetallic alignment tools to insure proper alignment.

2. AM Alignment CSC-980L (E), (UK), (GE), (FR)

Adjustment	Equipment Connection	Step No.	Generator Frequency	Tuning	Location to be Adjusted
IF	● AM Signal generator ● Sweep/marker generator ● Oscilloscope ● AC voltmeter ● Loop antenna ● Load resistance ● Dummy antenna ● Frequency counter Connect measuring instruments as shown in Fig. 1 and 2.	1	455 kHz CSC-980L(E),(FR) 460 kHz CSC-980L (GE) 470 kHz CSC-980L (UK)		AM, IFT-2, 3, 4 Adjustment maximum. Fig. 1.
		2	Repeat Steps to obtain Maximum Output.		
MW Band		3	505 kHz (Mod.)	505 kHz	Set generator frequency to 505 kHz with L-8 (MW oscillator coil). Fig. 2.
		4	1650 kHz (Mod.)	1650 kHz	Set generator frequency to 1650 kHz with TC-2 (Trimmer condenser).
		5	Repeat Steps 3 and 4 two or three times to adjust f. cover.		
MW Tracking		6	610 kHz (Mod.)	610 kHz	Adjust L-11 (Bar antenna) to obtain maximum sensitivity.
		7	1400 kHz (Mod.)	1400 kHz	Adjust TC-5 (Trimmer condenser) so to obtain maximum sensitivity.
		8	Repeat Steps 6 and 7 two or three times to obtain maximum sensitivity.		
SW Band		9	5.85 MHz (Mod.)	5.85 MHz	Set generator frequency to 5.85 MHz with L-7 (SW oscillator coil).
		10	18.5 MHz (Mod.)	18.5 MHz	Set generator frequency to 18.5 MHz with TC-1 (Trimmer condenser).
		11	Repeat Steps 9 and 10 two or three times to adjust f. cover.		
SW Tracking		12	7 MHz (Mod.)	7 MHz	Adjust L-10 (Antenna coil) to obtain maximum sensitivity.
		13	16 MHz (Mod.)	16 MHz	Adjust TC-4 (Trimmer condenser) so as to obtain maximum sensitivity.
		14	Repeat Steps 12 and 13 two or three times to obtain maximum sensitivity.		
LW Band		15	145 kHz (Mod.)	145 kHz	Set generator frequency to 145 kHz with L-9 (Oscillator coil).
		16	310 kHz (Mod.)	310 kHz	Set generator frequency to 310 kHz with TC-3 (Trimmer condenser).
		17	Repeat Steps 15 and 16 two or three times to adjust f. cover.		
LW Tracking		18	180 kHz (Mod.)	180 kHz	Adjust L-12 (Bar antenna) to obtain maximum sensitivity.
		19	280 kHz (Mod.)	280 kHz	Adjust TC-6 (Trimmer condenser) so to obtain maximum sensitivity.
		20	Repeat Steps 18 and 19 two or three times to obtain maximum sensitivity.		

○ Set the internal modulation signal generator to 30%, 400 Hz of each.
○ Use only nonmetallic alignment tools to insure proper alignment.

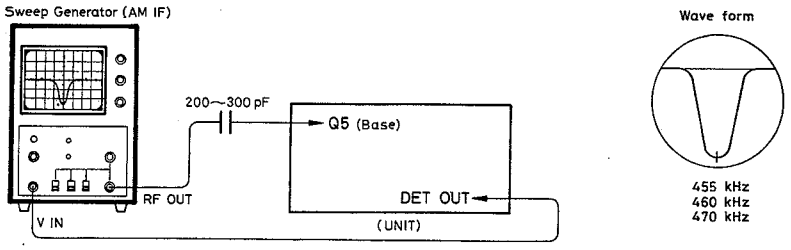


Fig. 1

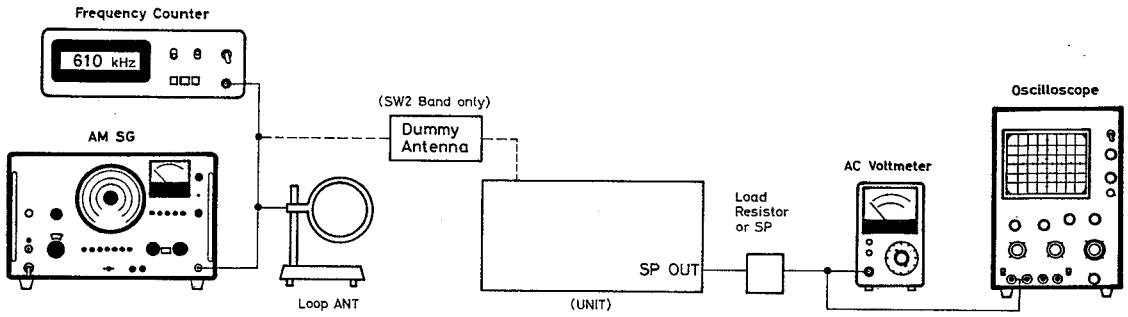


Fig. 2

3. FM Alignment

Adjustment	Equipment Connection	Step No.	Generator Frequency	Tuning	Location to be Adjusted
IF	● FM Signal generator ● FM Sweep/marker generator ● Oscilloscope ● AC voltmeter ● Dummy antenna ● Load resistance ● Frequency counter Connect measuring instruments as shown in Fig. 3 and 4.	1	10.7 MHz (Mod.)		FM, IFT-1 adjust for maximum gain IFT-1 adjust for symmetric "S" curve (Marker should appear in the middle of "S" curve). Fig. 3.
		2	Repeat Steps to obtain Maximum Output.		
FM Band		3	87 MHz (Mod.)	87 MHz	Set generator frequency to 87 MHz with VR6. Fig. 4.
		4	108.5 MHz (Mod.)	108.5 MHz	Set generator frequency to 108.5 MHz with VR7.
FM Frequency Meter		5	Repeat Steps 3 and 4 two or three times to adjust f. cover.		
		6	Depress the S10 (Preset U_1).		
		7	Set the VR1 to position of Lowest frequency. (C. Clockwise)		
		8	Depress the S7 (Preset U_4).		
		9	Set the VR4 to position of Highest frequency. (Clockwise)		
		10	As repeating Steps 6 and 8, adjust VR8 until FM Frequency Meter shows Lowest position and Highest position.		

○ Use only nonmetallic alignment tools to insure proper alignment.

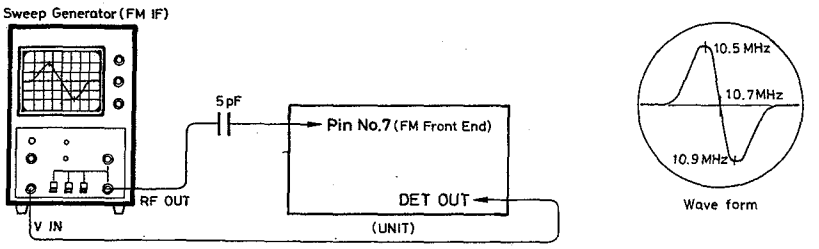


Fig. 3

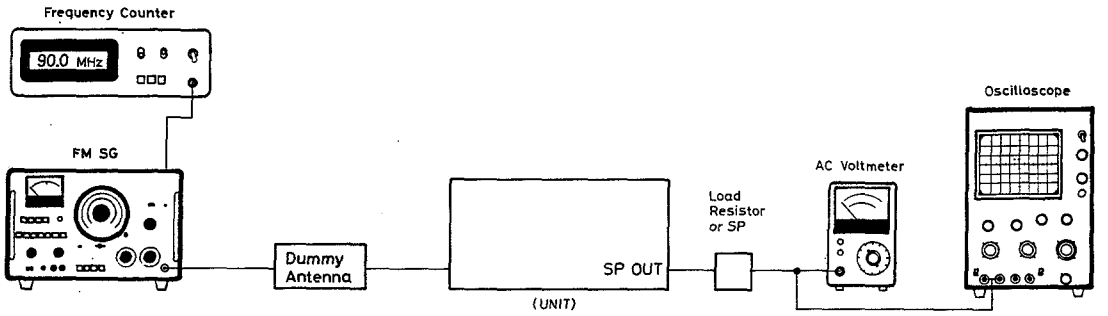


Fig. 4

4. FM MPX Adjustment

Connect test instrument as shown in Fig. 5.

1) 19 kHz Adjustment

Connect frequency counter T.P (IC2 No. 12 pin) and earth, adjust the semi-fixed resistor VR9 for reading of 19 kHz on the counter.

Note: When adjusting 19 kHz in the multiplex circuit, connect a capacitor (0.022 μF) to IC2 No. 2 pin to shut off the signal and noise.

2) Separation Adjustment

a) Set the FM signal generator to 98 MHz and an output of 1 mV (60 dB).

b) Set the stereo signal generator to 90% main signal and 10% pilot signal. Modulation frequency: 400 Hz.

c) Switch the stereo signal to left (or right) and adjust the semi-fixed resistor VR10 to minimize the right (or left) output.

Note: Adjuste VR10 until more than 25 dB separation is obtained between the left and right channels.

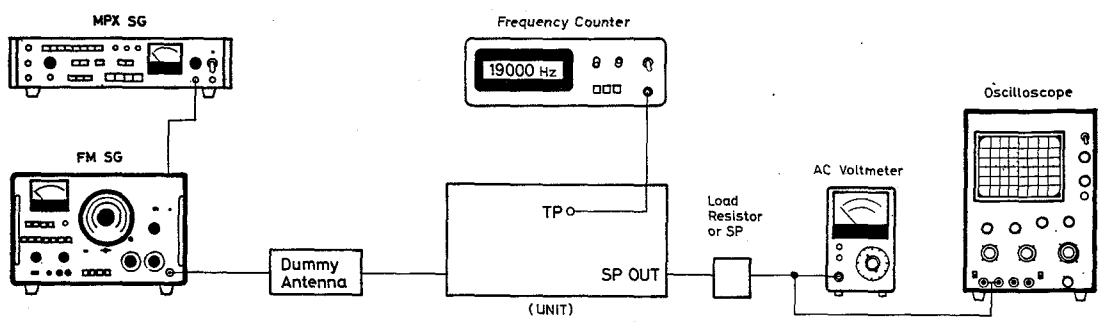


Fig. 5

MECHANICAL ADJUSTMENT

1. Tape Speed Adjustment

With AC.V.M. connected to SP OUT, play a standard tape (f = 3kHz). Insert a screwdriver through the adjusting hole on the motor and adjust the semi-fixed resistor until the frequency counter reads 3 kHz.

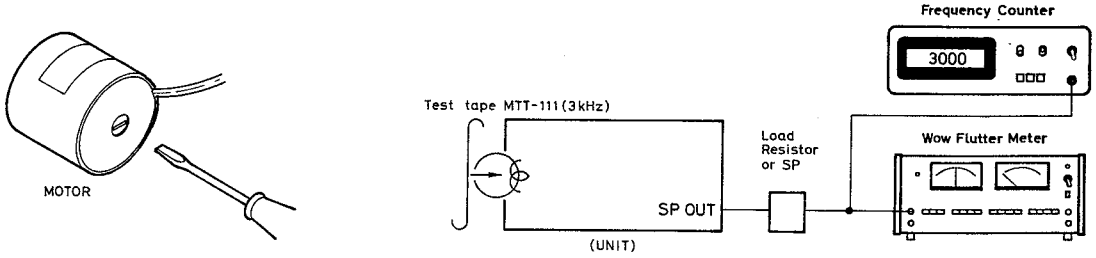


Fig. 6

2. Head Azimuth Adjustment

With AC. V.M. connected to L and R channels SP OUT, play a standard tape (10 kHz, − 10 dB). Turn the head azimuth adjusting screw for a maximum and same reading on L and R channels AC. V.M. After the adjustment, secure the screw with a locking paint.

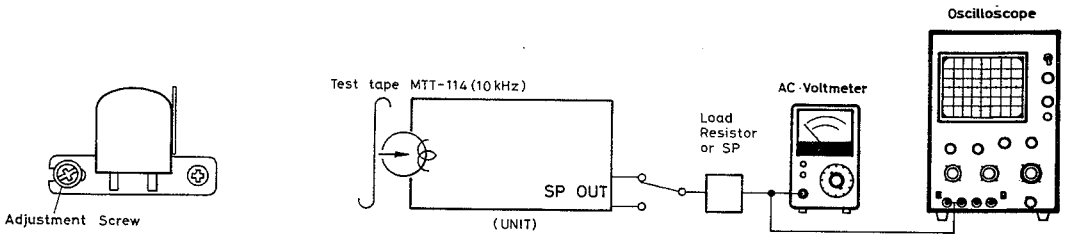


Fig. 7

3. Gap Adjustment

The gap between the center shaft of the flywheel and the flywheel retaining plate should be adjusted within the range of 0.01 to 0.1 mm.

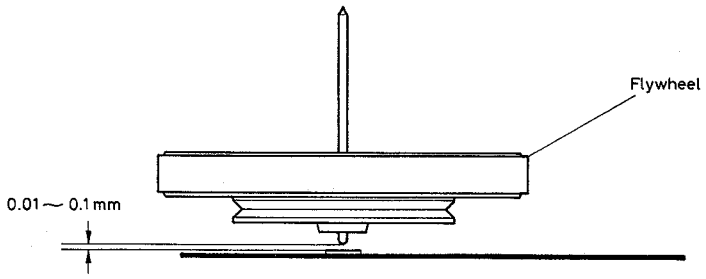


Fig. 8

4. Take-up Torque

40 ~ 70 g-cm

Measure on the take-up reel platform operating in play. If less than 40 g-cm, check to see if it is caused by slippage between the reel platform and the play idler.

(1) If found to be slipping, wipe and clean the rubber portion of the play idler, take-up reel platform, clutch pulley, drive belt using alcohol.

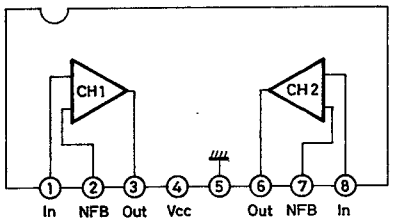
(2) If the reel platform itself is the cause of the slippage replace the reel platform.

Tape Head Demagnetization

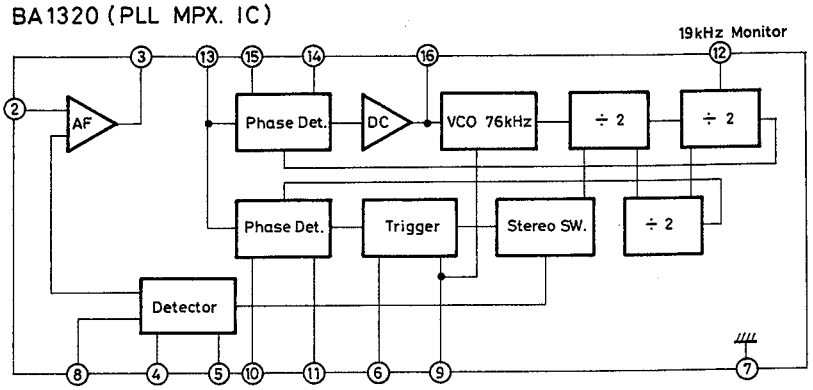
The tape head may be magnetized if a magnetized tool is brought close to it or the tape deck is used for an extended period of time. When the head is magnetized, the result is a loss of hight frequency or an increase of noise in tape. Magnetized tape head should be demagnetized by using a head demagnetizer.

IC BLOCK DIAGRAM

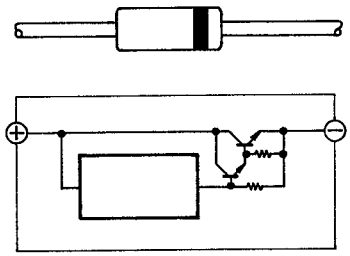
BA 328 (Pre-Amp IC)



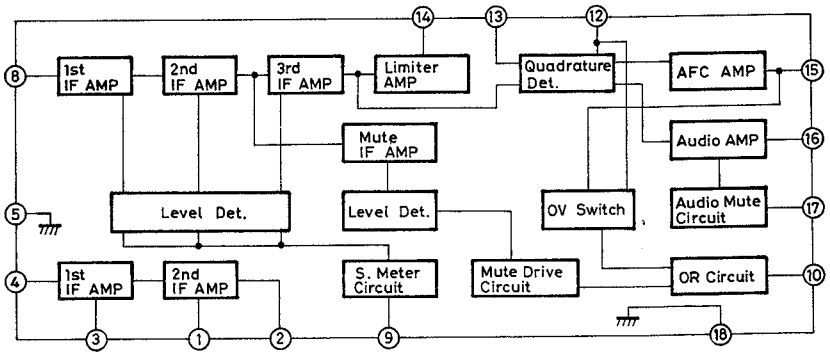
BA1320 (PLL MPX. IC)



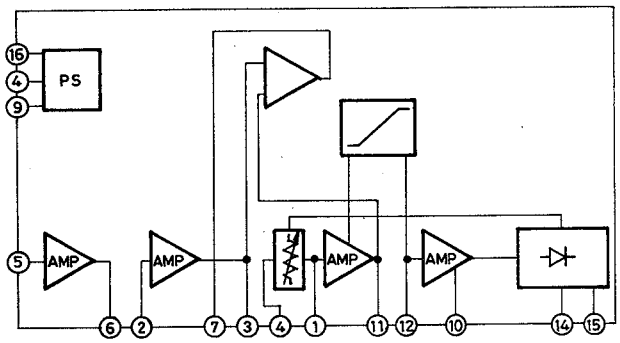
ZTK 11 (Zener IC)



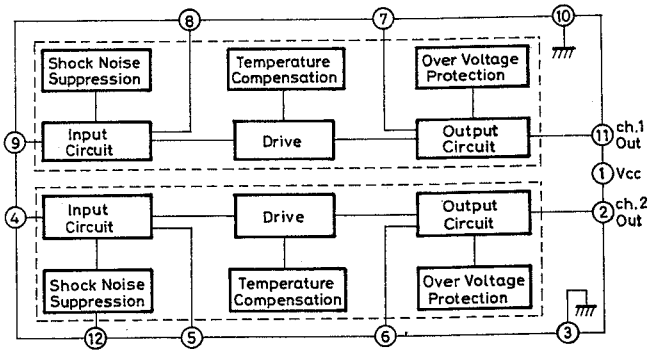
HA 11211 (IF & Det. IC)

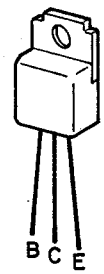
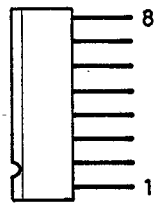
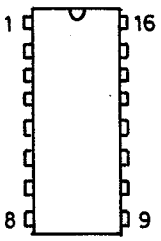
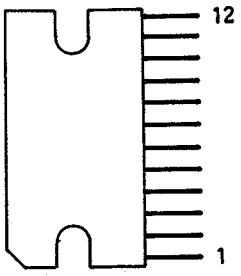


NE646B (Dolby NR IC)



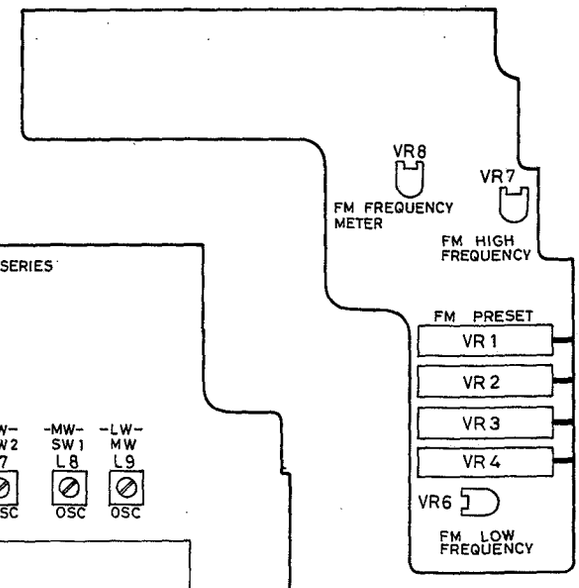
AN7158 (Power IC)



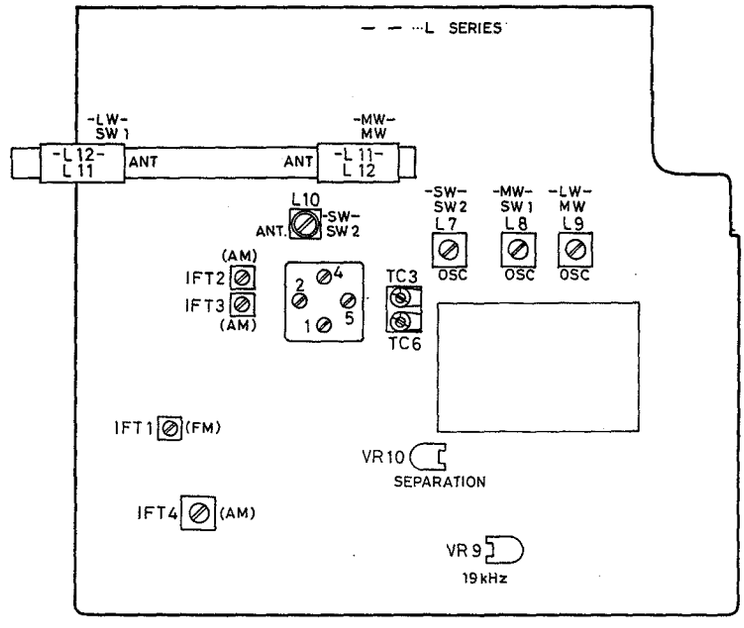
					
2SD361	2SC710 711 1312 2SD355	2SC460	BA 328	BA1320 HA11211 NE646B	AN 7158

ADJUSTMENT POINTS

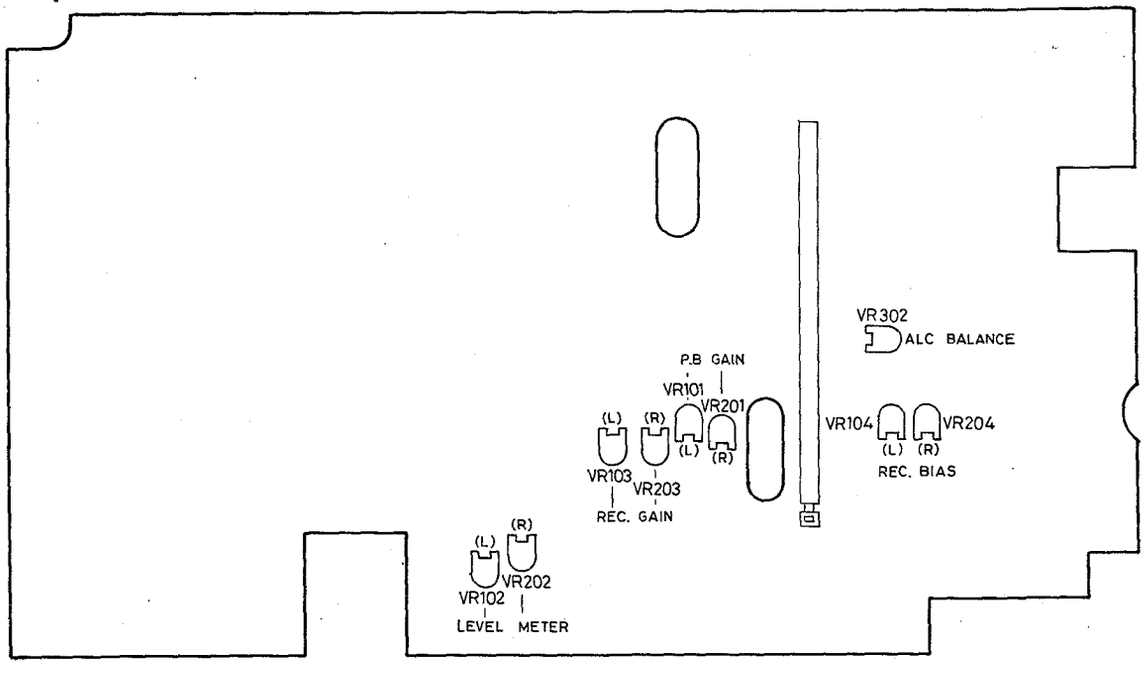
Preset P.C. Board



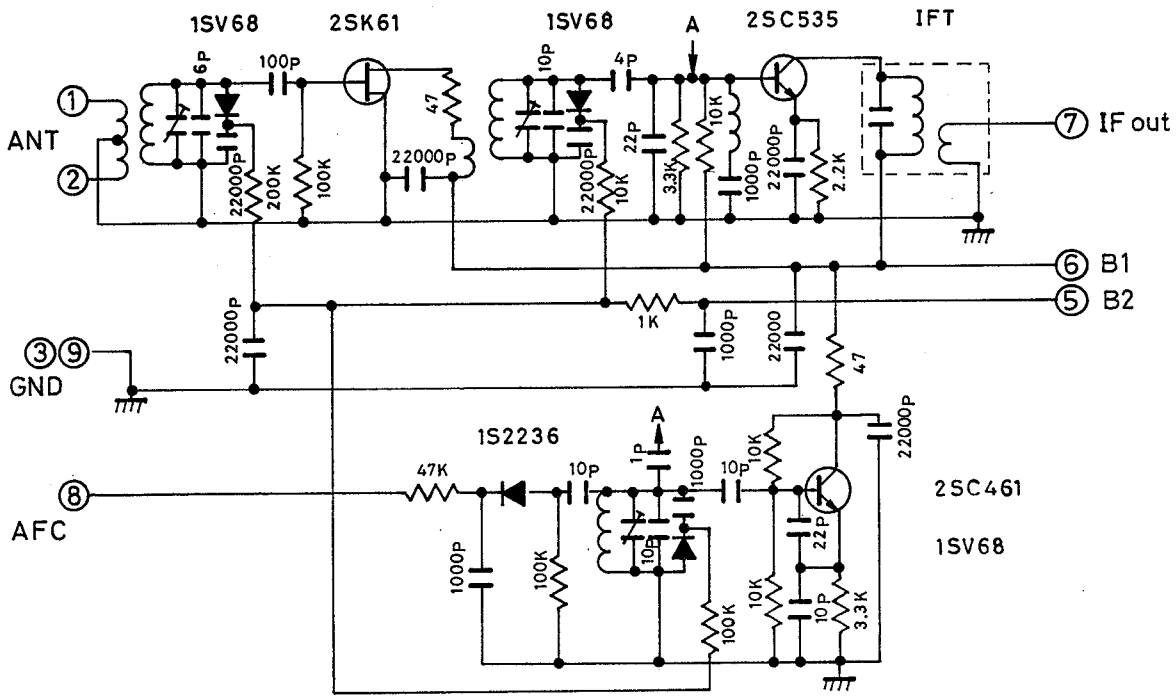
Tuner P.C. Board



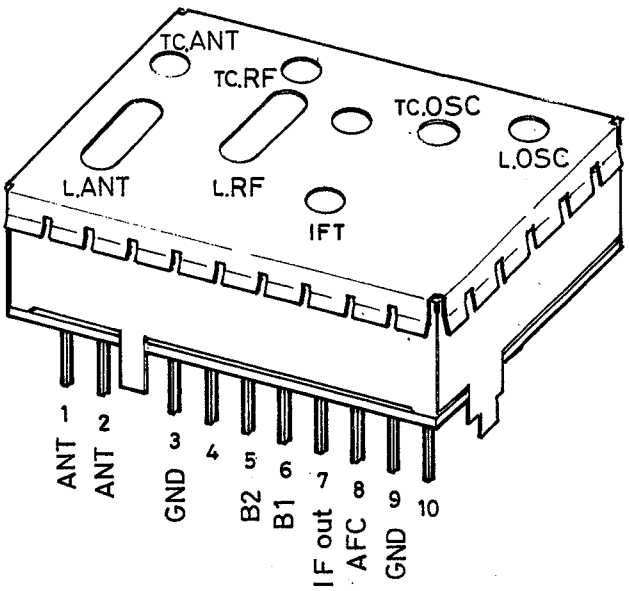
Amp. P.C. Board



FM FRONT END UNIT (AM-UF-149)

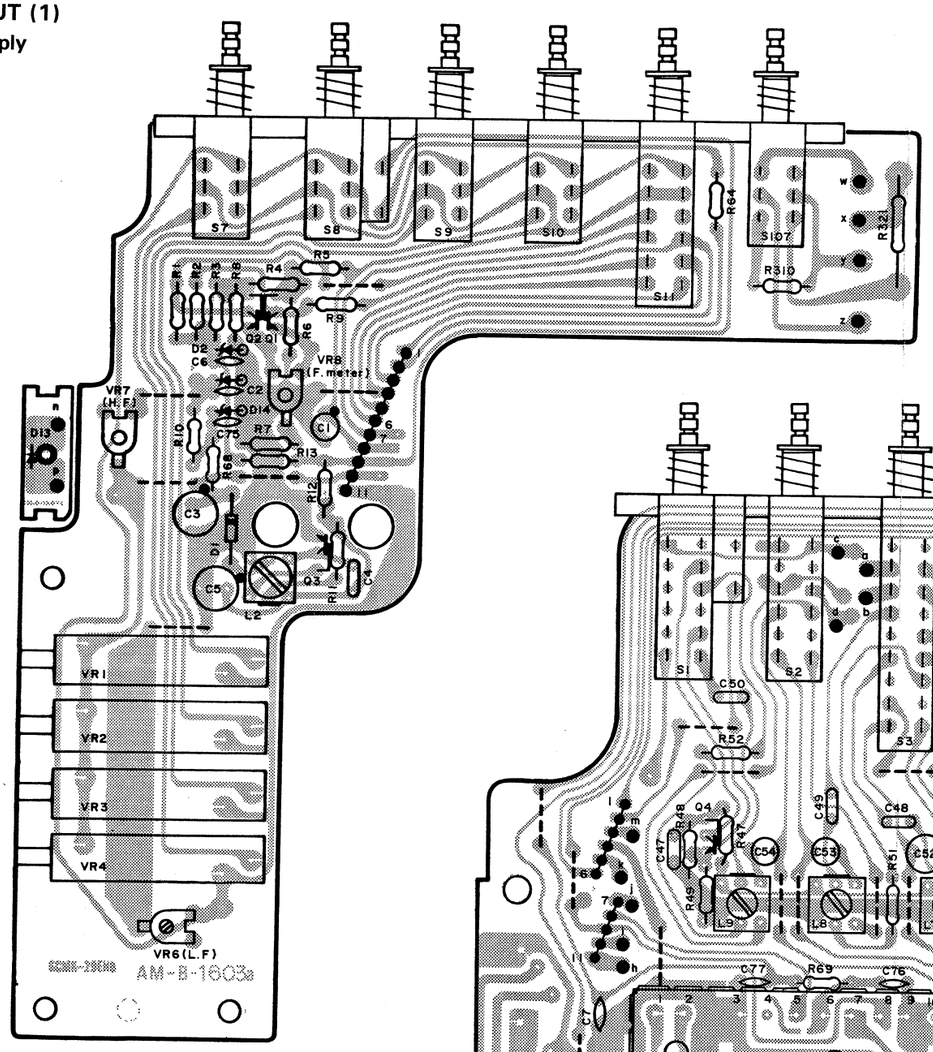


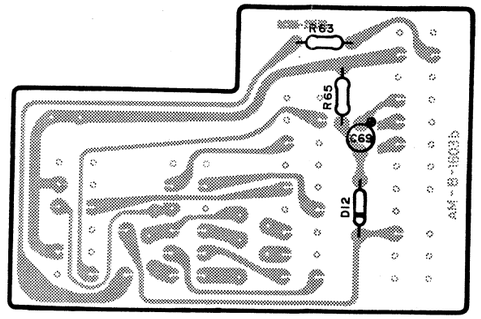
1. Receiving Range 87.4 ~ 109 MHz
2. IF 10.7 MHz
3. + B(B1) 12V
4. Tuning Voltage(B2) +2.87 ~ +9.40V
5. AFC Voltage +5.6 ± 1V
6. Input Impedance 300Ω

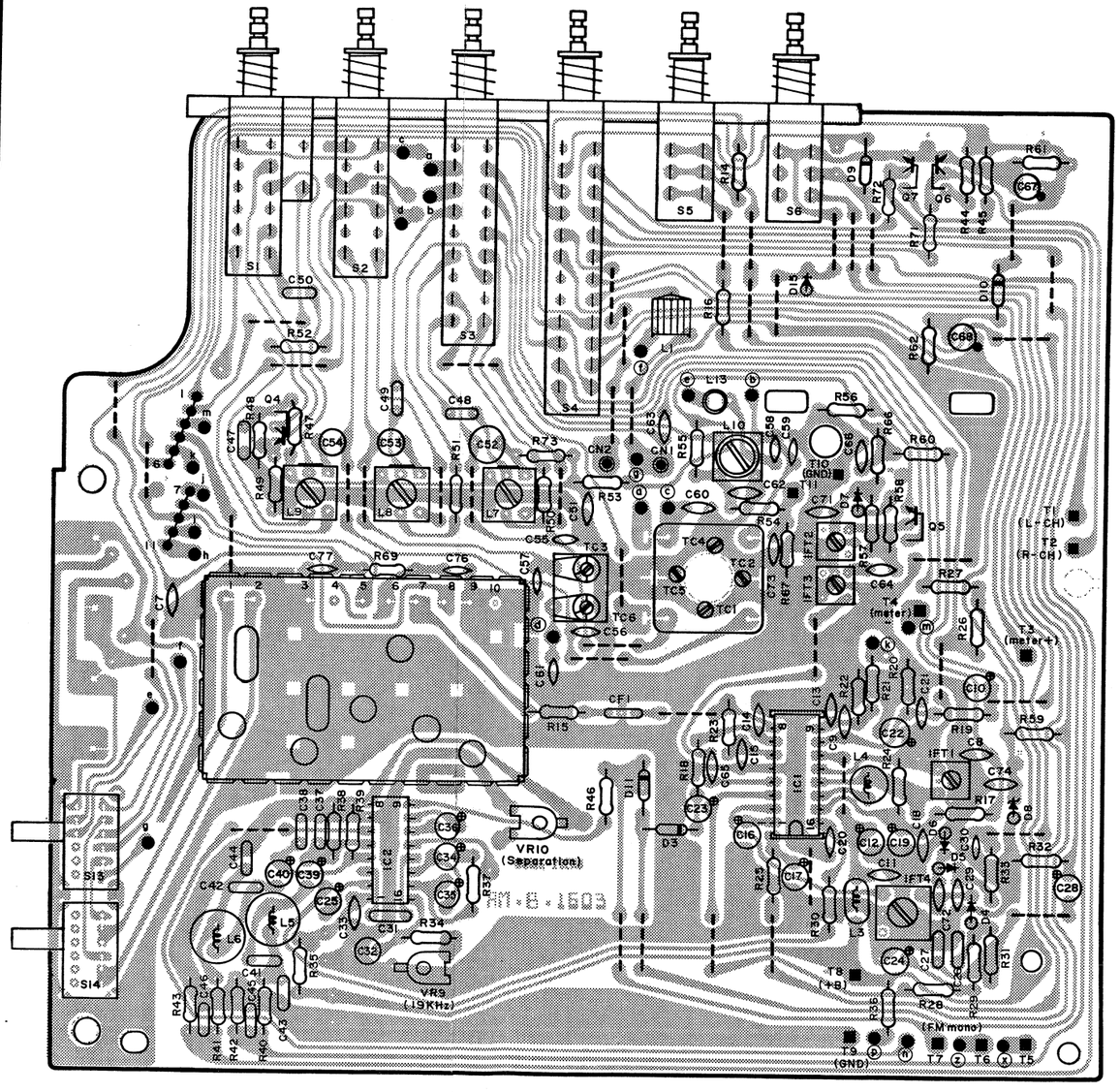


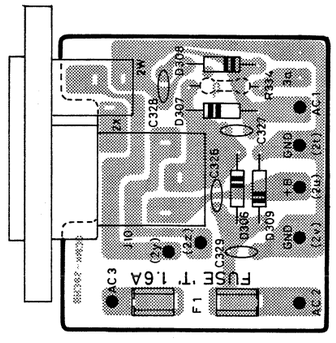
Tuning Voltage(V)	3.00	3.97	5.05	6.25	7.55	9.00
Tuning Frequency (MHz)	88.0	92.0	96.0	100.0	104.0	108.0

WIRING BOARD LAYOUT (1)
Tuner, Preset, Power Supply
980F (X)

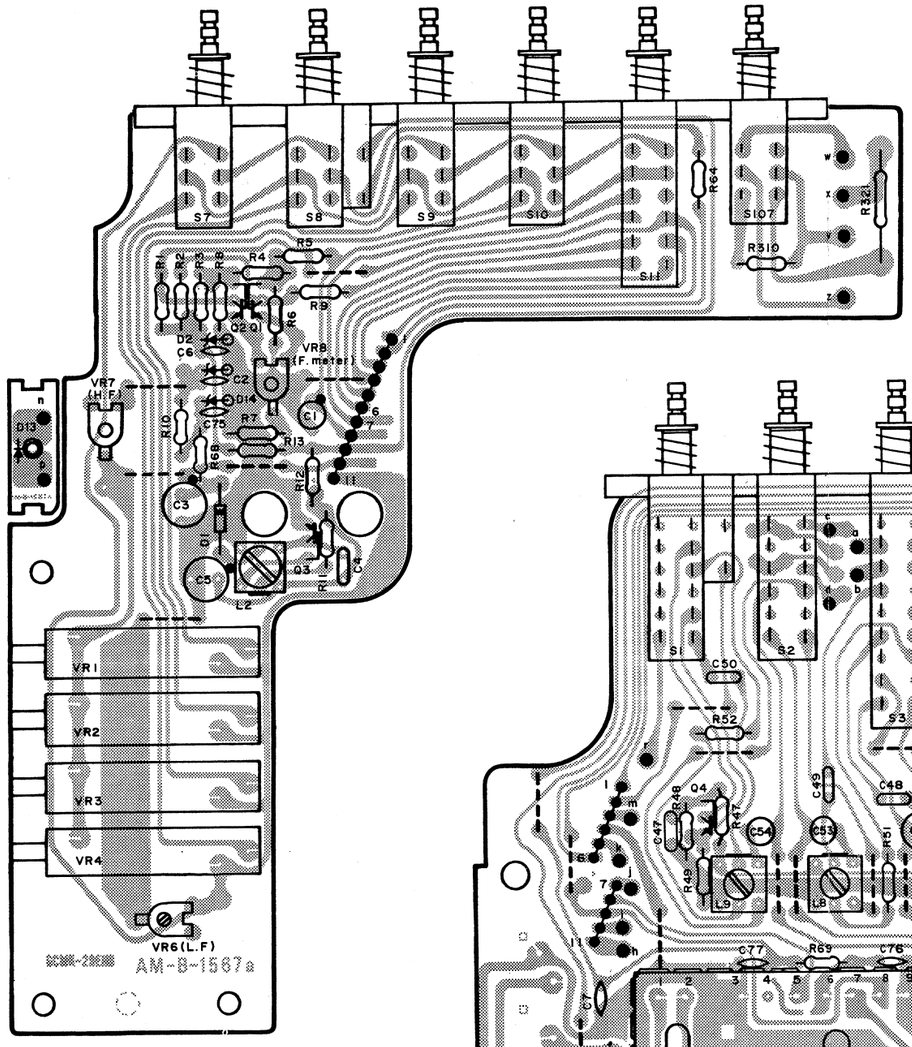


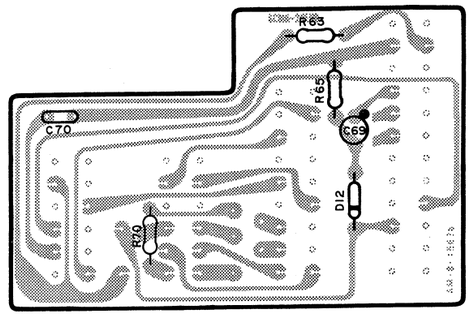


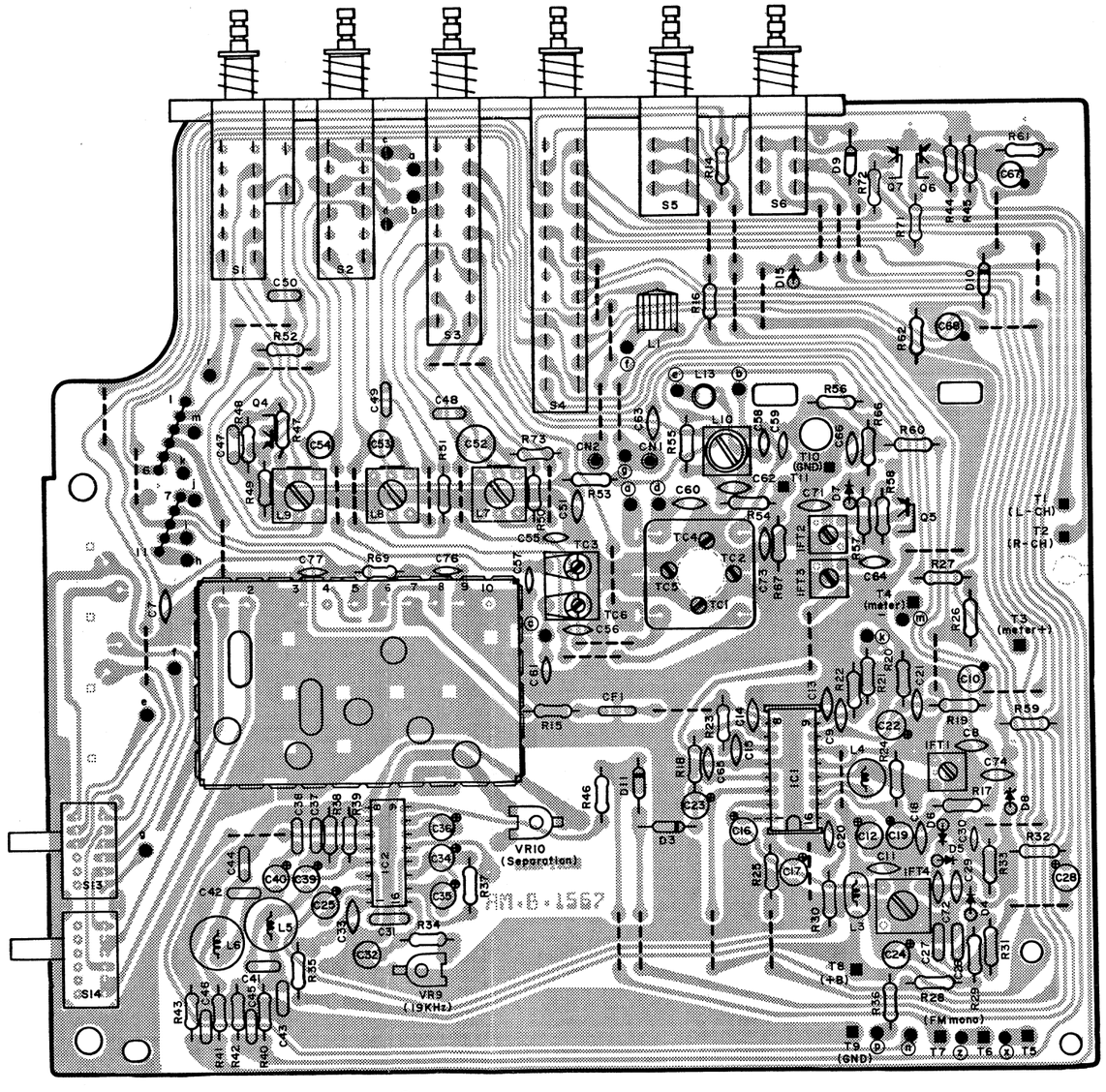


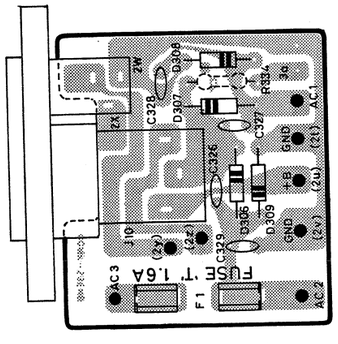


WIRING BOARD LAYOUT (2)
Tuner, Preset, Power Supply
980L (E), (UK), (GE), (FR)





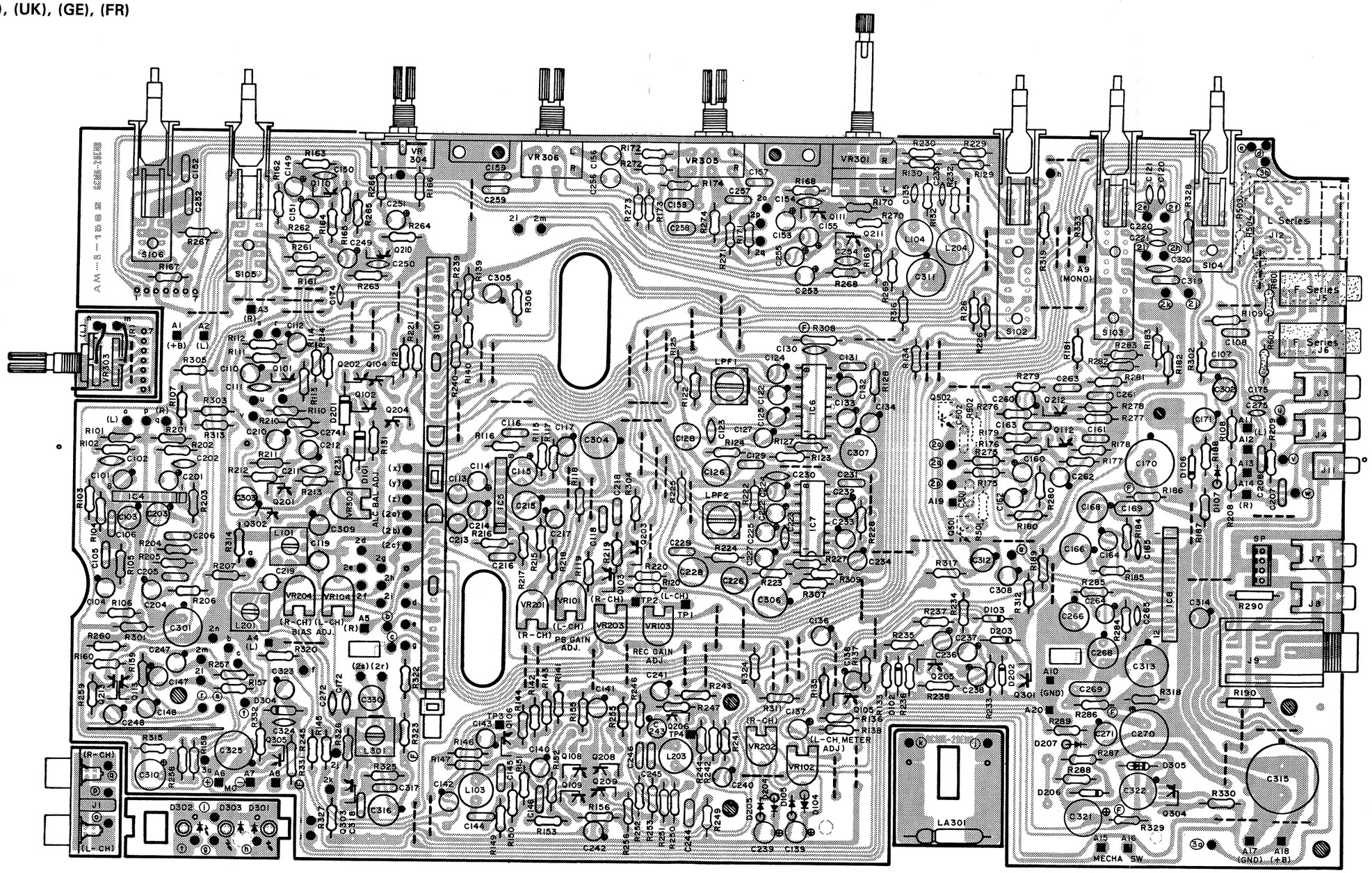




(Volt)	1	2	3	4	5	6	7
B	2.0	2.0	-0.01	1.5	1.4	0.7	0.7
C	8.4	8.4	9.0	5.5	6.0	0	0
E	1.5	1.4	0	1.0	0.8	0	0
Condition	FM (f. min)			F.M		Muting ON	
				M.W			

(Volt)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	Condition
IC1 HA 11211	3.7	0	2.4	0.7	0	2.0	2.0	2.0	0	5.2	9.4	5.6	5.6	5.6	5.6	5.7	0	0	F
	2.7	0	3.3	0.7	0	2.5	2.5	2.5	0	5.3	9.4	5.6	5.6	5.6	6.4	6.5	0	0	M
IC2 BA 1320	8.5	2.9	2.4	3.3	3.3	—	0	0.6	0.02	2.2	2.2	1.4	2.2	2.2	2.2	2.9			F
	8.5	2.8	2.4	3.3	3.3		0	0.6	1.1	2.2	2.2	—	2.2	2.2	2.2	4.8			M

WIRING BOARD LAYOUT (3)
Amp.
980F (X), 980L (E), (UK), (GE), (FR)



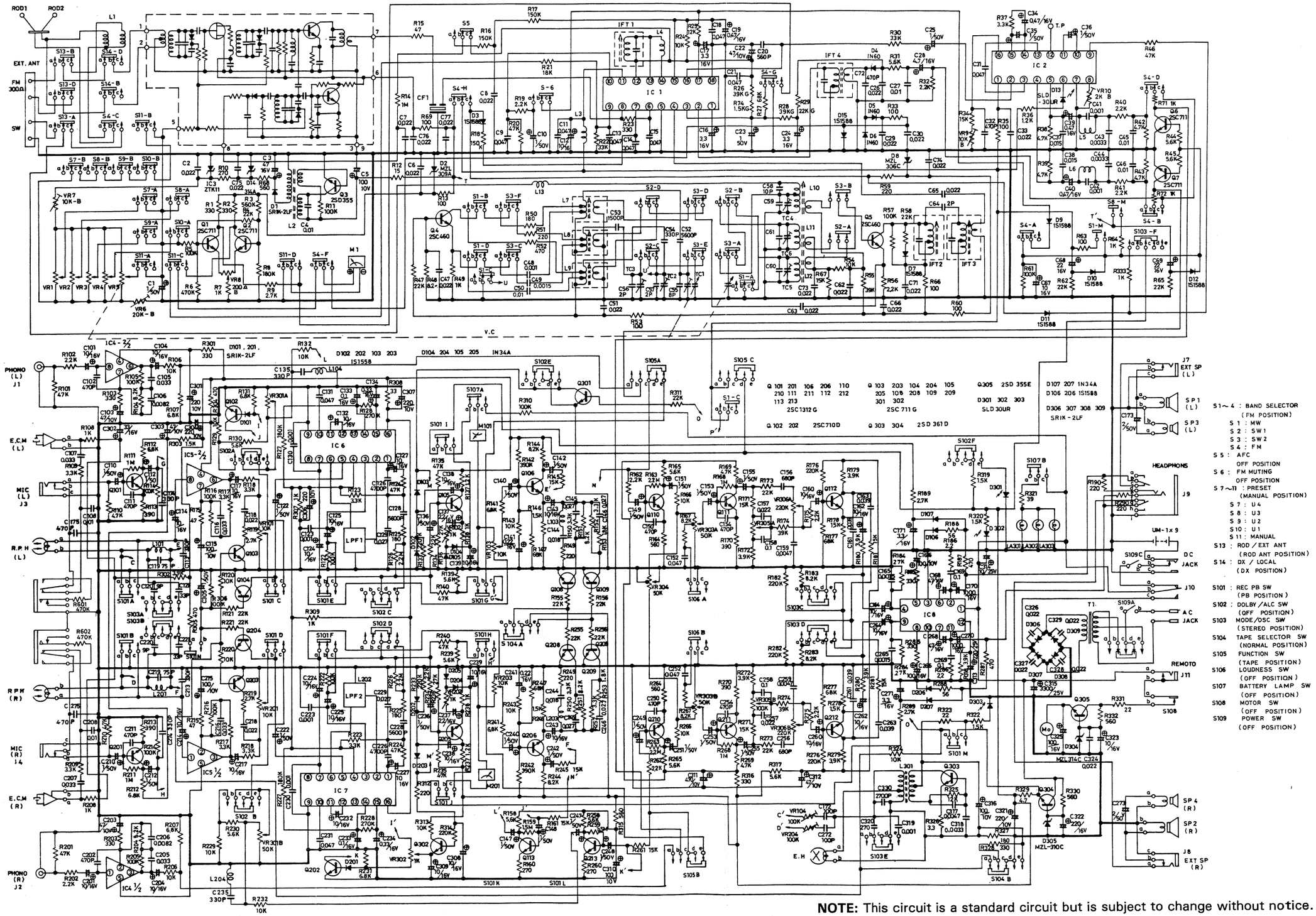
(Volt)

Q	101	102	103	104	105	106	108	109	110	111	112	113	301	303	304	305	501	502
B	0.9	0.6	0.6	0	3.6	1.4	0.6	0.6	1.0	1.1	1.2	0.9	0.6	0.4	10.6	13.8	0.6	0.6
C	2.5	0	0	0	6.6	5.8	0	0	4.5	3.2	3.7	3.7	0	8.7	20.0	19.0	0	0
E	0.3	0	0	0	3.0	0.8	0	0	0.4	0.5	0.6	0.3	0	0.3	10.0	14.4	0	0
Condition		ALC ON	Metal				CrO_2	Metal					P.B	REC METAL			RADIO LW	

(Volt)

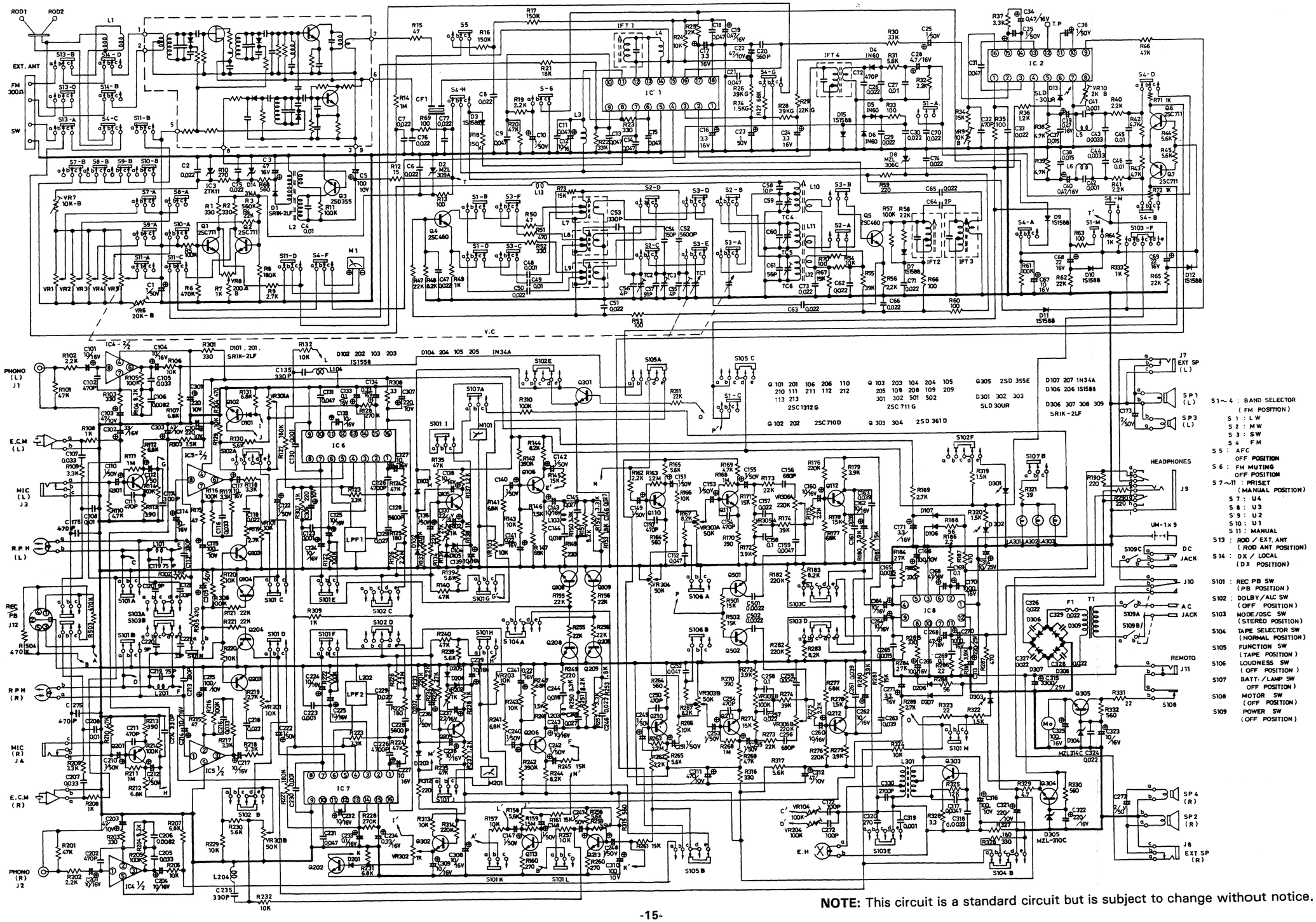
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
IC4,5 BA 328	1.4	0.9	4.2	8.8	0	4.2	0.9	1.4								
IC6,7 NE 646B	4.6	4.7	5.2	4.6	4.6	4.7	3.9	—	0	4.6	4.7	4.6	—	4.6	4.5	9.2
IC8 AN7145	20.0	9.5	0	0.07	1.3	7.3	17.3	1.3	0.07	0	9.6	18.1				

SCHEMATIC DIAGRAM (1) 980F (X)



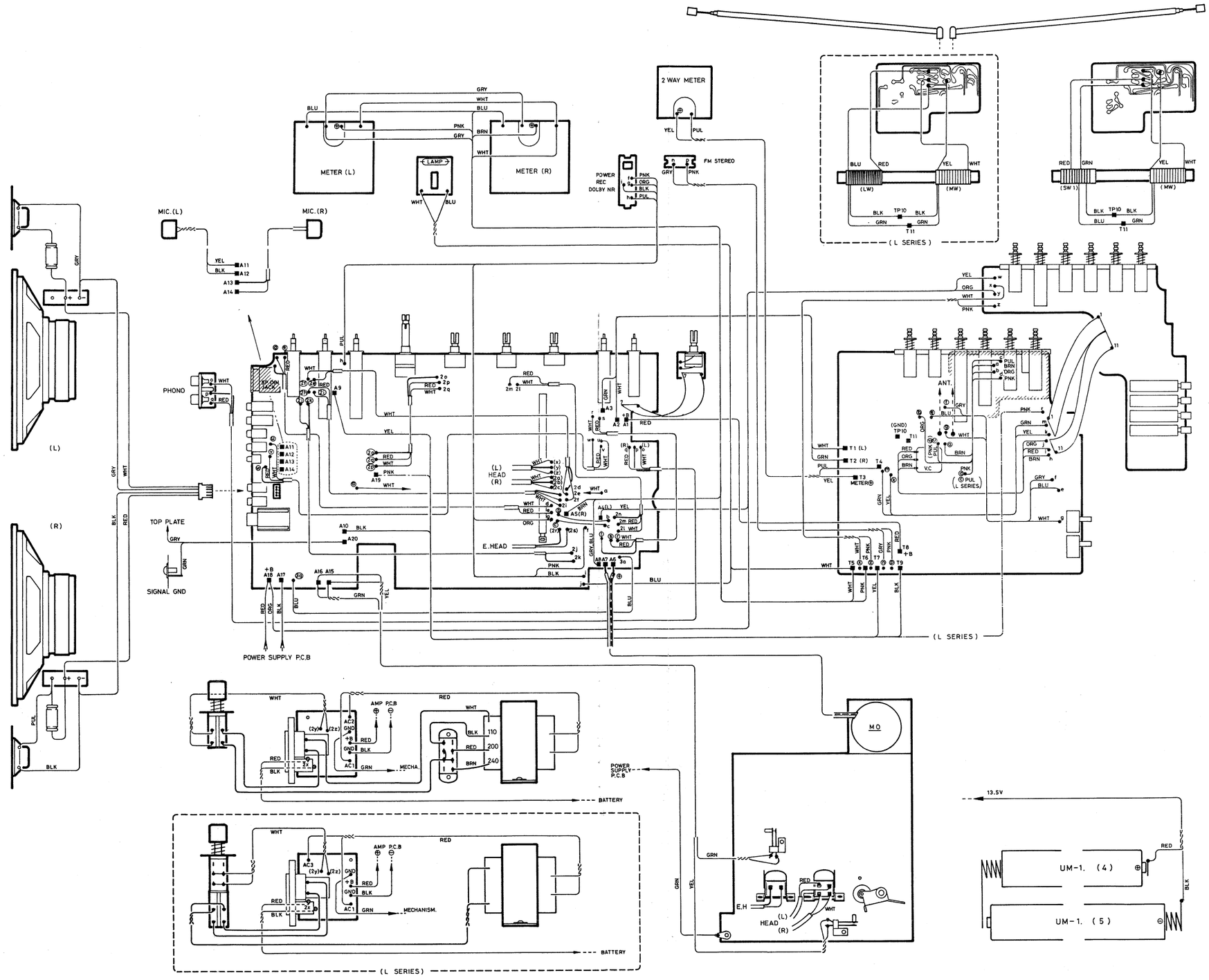
NOTE: This circuit is a standard circuit but is subject to change without notice.

SCHEMATIC DIAGRAM (2) 980L (E), (UK), (GE), (FR)

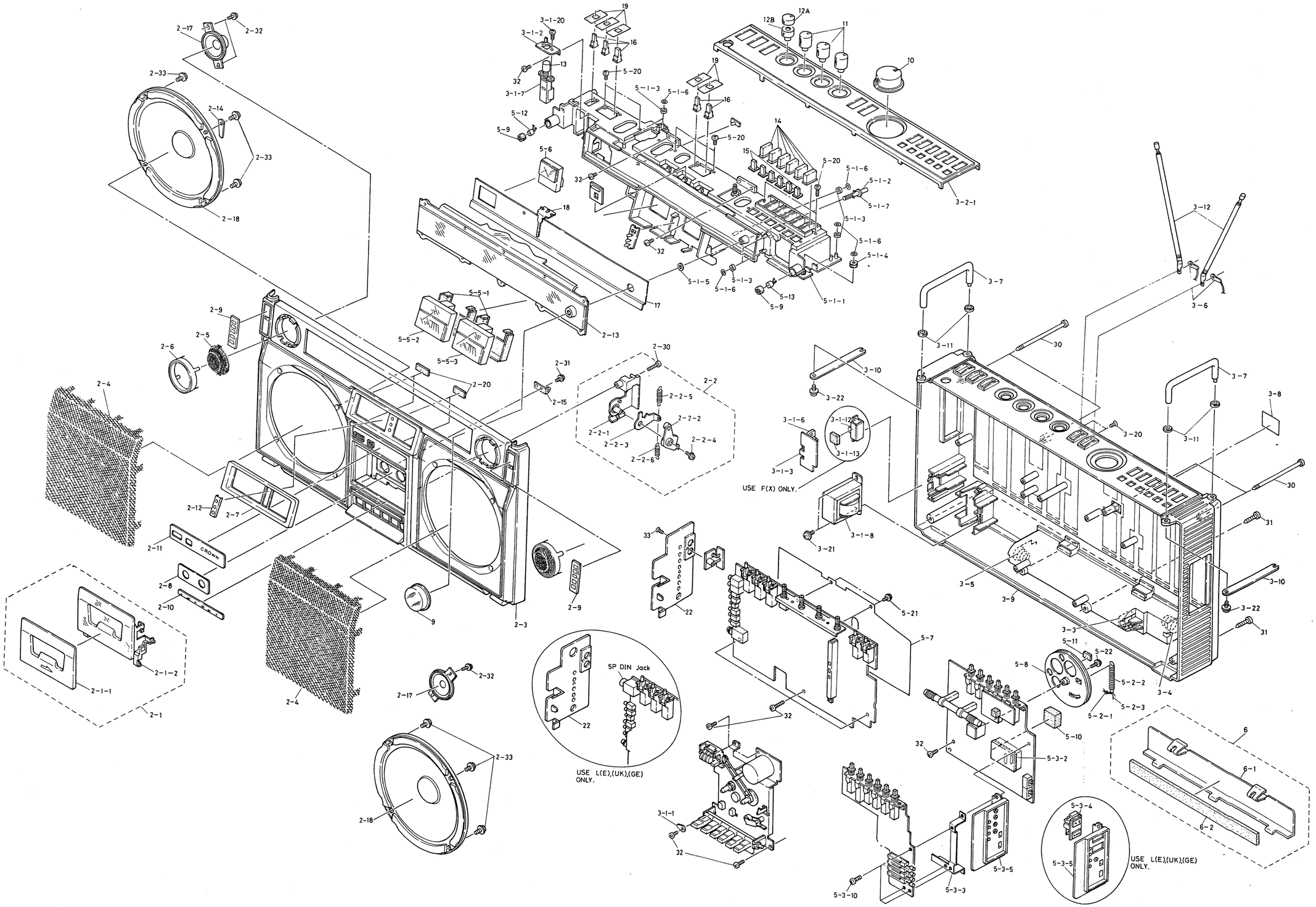


NOTE: This circuit is a standard circuit but is subject to change without notice.

LEAD CONNECTION

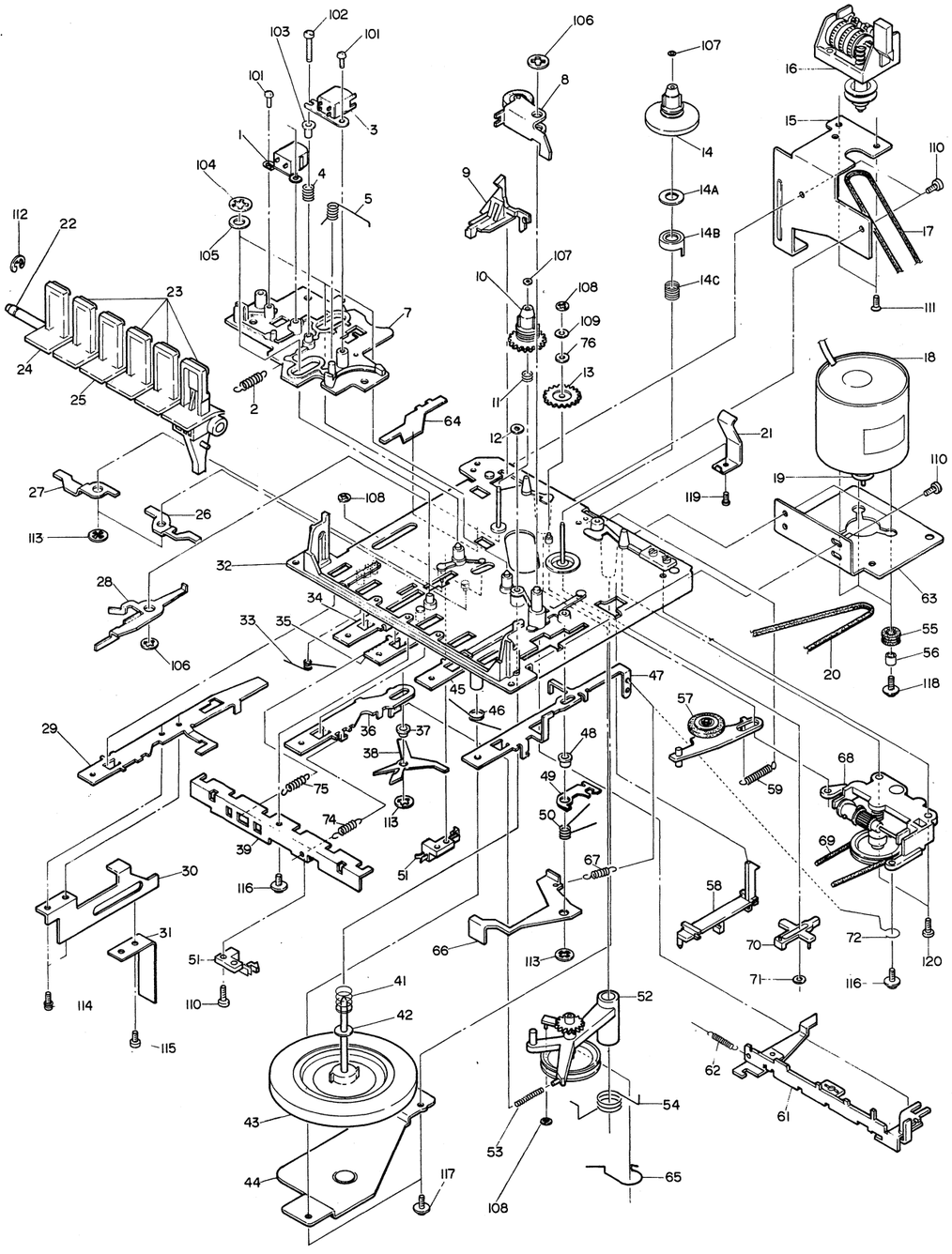


EXPLODED VIEW
Cabinet



EXPLODED VIEW
Mechanism

NTP 408Z-11



REPLACEMENT PARTS LIST (1)

CSC-980 F (X)

MAIN COMPONENT PARTS

Parts with "X" in the remarks cannot be supplied

Ref. No.	Stock No.	Description	Q'ty	Remarks
1	9253181	AC Cord Ass'y	1	
2	9259111	Front Cabinet Ass'y	1	X
3	9259112	Rear Cabinet Ass'y	1	X
4	9258030	Mechanism Ass'y	1	X
5	9259161	Chassis Ass'y	1	X
6	9258072	Battery Lid Ass'y	1	
7	9259178	Instruction Book Ass'y	1	
8	9259190	Carton Box Ass'y	1	X
9	1215056	Dial Knob R79056-007 (I)	1	
10	1225147	Volume Knob R79056-008 (I)	1	
11	1225146	Volume Knob R79056-009 (I)	3	
12A	1225157	Volume Knob R79066-006 (I)	1	
12B	1225158	Volume Knob R79066-007 (I)	1	
13	1265091	Power Button R78149-017 (I)	1	
14	1265100	Selector Button R78149-014 (RO)	6	
15	1265101	Selector Button R79066-008 (I)	6	Preset
16	1275029	Lever Knob R78149-016 (RO)	5	
17	1485394	Dial Scale R79166-005 (I)	1	
18	2315168	Dial Pointer R78149-032 (I)	1	
19	2675093	Packing R78149-043	5	
20	4345012	Shoulder Band R78149-044	1	
21	4491210	Polyethylene Bag-B 800X550X0.04	1	
22	7710314	Jack Plate Unit AM-Z-314	1	
30	3300014	PHT Screw 4X100 S/NI	4	Rear Cabinet
31	3313110	PHT Screw A4X20 S/NI	4	Rear Cabinet
32	3311184	PHT Screw A3X16 S/NI	12	
33	3331109	OCT Screw A3X12 S/PK	1	

1. AC CORD ASS'Y

Ref. No.	Stock No.	Description	Q'ty	Remarks
1-1	4491102	Polyethylene Bag A-02 75X250X0.04	1	
1-2	7660275	AC Cord AM-YS-275	1	

2. FRONT CABINET ASS'Y

Ref. No.	Stock No.	Description	Q'ty	Remarks
2-1	9258071	Cassette Holder Ass'y	1	
2-2	9253274	Damper Ass'y	1	
2-3	1115396	Front Cabinet R79066-001 (I)	1	
2-4	1315137	Speaker Net R79066-017 (I)	2	Woofer
2-5	1315138	Speaker Net R79066-018 (I)	2	Tweeter
2-6	1375107	Tweeter Ring R79066-012 (I)	2	
2-7	1385131	Meter Frame R78149-025 (I)	1	
2-8	1445139	Reel Plate R78148-014 (I)	1	
2-9	1445144	Mic Plate R78149-029 (I)	2	
2-10	1445187	Indicate Plate R78149-028 (RO)	1	
2-11	1445239	Brand Plate R79166-007 (I)	1	
2-12	1445220	LED Plate R79066-016 (I)	1	
2-13	1715528	Dial Scale Cover R78149-006	1	
2-14	2185232	Cord Clamp R7707-140	1	
2-15	2295520	Cassette Holder Bracket R78149-039	1	
2-16	7140173	Non Pole Electrolytic AM-CS-173	2	C173, 273 (2 μF 50 V)
2-17	7420266	Speaker AM-P-266	2	SP3, 4 (Tweeter)
2-18	7420267	Speaker AM-P-267	2	SP1, 2 (Woofer)
2-19	7740403	4P Connector AM-ZE-403	1	
2-20	2675020	Packing N6 DF	4	10X20 BK
2-21	2675095	Packing-2 R78145-020	2	10X100 DF

Ref. No.	Stock No.	Description	Q'ty	Remarks
2-22	2675119	Packing-2 R78149-050	3	
2-23	2675121	Packing-3 R78149-053	1	5X100 DF
2-24	2675125	Packing-5 R78149-056	1	
2-30	3311185	PHT Screw A3X20 S/Z	2	
2-31	3321106	FCT Screw A3X12 S/Z	1	
2-32	3618004	PWT Screw A3X10 S/Z	4	
2-33	3618025	PWT Screw A4X12 S/Z	8	

2-1. CASSETTE HOLDER ASS'Y

Ref. No.	Stock No.	Description	Q'ty	Remarks
2-1-1	1445188	Holder Plate R79056-055 (RO)	1	
2-1-2	2165217	Cassette Holder R78149-005 (I)	1	

2-2. DAMPER ASS'Y

Ref. No.	Stock NO.	Description	Q'ty	Remarks
2-2-1	2165216	Damper Holder R78149-019	1	
2-2-2	2325180	Damper Operation Plate-1 R78149-018	1	
2-2-3	2325181	Damper Operation Plate-2 R78149-020	1	
2-2-4	3311200	WFT Screw A3X10 S/Z	1	
2-2-5	3825910	Holder Spring-1 R78149-021	1	
2-2-6	3825911	Holder Spring-2 R78149-022	1	

3. REAR CABINET ASS'Y

Ref. No.	Stock No.	Description	Q'ty	Remarks
3-1	9259153	Power Supply Ass'y	1	X
3-2	9259175	Top Plate Ass'y	1	
3-3	2365348	+ Battery Terminal R75163-026	1	9258082
3-4	3815074	Battery Spring R75121-061	1	9258083
3-5	3815091	Battery Spring R7877-055A	1	
3-6	2175035	Antenna Terminal R78154-025	1	9258084
3-7	1285103	Handle R78149-033A (I)	2	
3-8	1415857	Name Plate R79116-002 (I)	1	
3-9	1615377	Rear Cabinet R79116-001 (I)	1	
3-10	2365500	Handle Retainer R78149-051	2	
3-11	3635186	Handle Washer-2 R78149-048B (I)	4	
3-12	7220144	Rod Antenna AM-K-144	2	
3-20	3133312	OC Screw 3X12 B/NI	2	Rod Antenna
3-21	3618026	PWT Screw A4X16 S/Z	2	
3-22	3618045	PW Screw 4X12 S/Z	2	

3-1 POWER SUPPLY ASS'Y

Ref. No.	Stock No.	Description	Q'ty	Remarks
3-1-1	2176007	Earth Lug 3mm	1	
3-1-2	2255089	Power Switch Bracket R78149-038	1	
3-1-3	7121603	Power Supply Board AM-B-1603	1	
3-1-4		Not Use		
3-1-5		Not Use		
3-1-6	7210149	AC Socket AM-J-149	1	J10
3-1-7	7460801	Power Switch AM-S-801	1	S 109
3-1-8	7530821	Power Transformer AM-TS-821	1	T1 (110,200,240 V)
3-1-9		Not Use		
3-1-10	8120322	Diode SR1K-2LF	4	D306~309
3-1-11	5527223	Ceramic 0.022μF 50V Z F	4	C326~329
3-1-12	7460664	Slide Switch AM-S-664	1	
3-1-13	2665965	Cushion R7708-046 10X20	1	

3-2 TOP PLATE ASS'Y

Ref. No.	Stock No.	Description	Q'ty	Remarks
3-2-1	1445240	Top Plate R79116-006 (I)	1	
3-2-2	3790044	Grommet 2X2 B/K	1	

4. MECHANISM ASS'Y

Ref. No.	Stock No.	Description	Q'ty	Remarks
4-1	2835894	Mechanism Unit R79066-30000	1	
4-2	3615065	PHDT Screw 2.6X5 S/Z	1	

4-1 MECHANISM UNIT

Ref. No.	Stock No.	Description	Q'ty	Remarks
1	7190227	Erase Head AM-H-227	1	E. H.
2		Spring PBE 13977	1	
3	7190226	Rec/Play Head AM-H-226	1	R. P. H
4	0002321	Head Spring PBE 13666	1	
5	0002311	Pinch Roller Spring PBE 13641	1	
6		Not Use		
7		Head Plate PBB 1060	1	
8	0002570	Pinch Roller Unit PBE 01152	1	
9	0002321	Inter Lock Plate PBC 1077	1	
10	0002306	Supply Reel Ass'y PBE 01054	1	
11	0002309	Supply Reel Brake Spring PBE 13640	1	
12	0002337	Oil Cut Washer PBE 13891	1	
13	0002302	Idler Gear PBE 13629	1	
14	0002307	Take Up Reel Ass'Y	1	
14A		Washer PBE 14265	1	
14B		Clutch PBE 13723	1	
14C		Spring PBE 13848	1	
15		Counter Bracket PBE 14205	1	
16	7310121	Counter AM-M-121	1	
17	0002573	Counter Belt PBE 5001	1	
18	0002566	Motor EG510ED-2F	1	12V 2400rpm CW
19	0002571	Motor Pulley PBE 13657	1	
20	0002565	Motor Belt PBE 13687	1	
21	0002313	Cassette Holder Spring PBE 13722	1	
22	0002483	Button Shaft PBE 14247	1	
23	1255245	Push Button-1 R79066-004 (I)	4	
24	1255246	Push Button-2 R79066-004 (RO)	1	Rec
25	1255247	Push Button-3 R79066-004 (HA)	1	Play
26	0002593	Cue Lever PBE 13866	1	
27	0002592	Review Lever PBE 13865	1	
28	0002293	Switch Plate PBE 13693	1	
29	0002599	Rec Lever PBD 1456	1	
30	0002594	Rec Spring Plate Bracket PBE 14206	1	
31		Rec Spring Plate PBE 14320	1	
32		Chassis Ass'y PBD 0619	1	
33		Lever Return Spring PBE 14056	2	
34	0002602	Rew Lever PBD 1510	1	
35	0002600	Play Lever PBD 1496	1	
36	0002598	FF Lever PBD 1455	1	
37		FF Collar PBE 13646	1	
38	0002601	Pause Assist Plate PBD 1503	1	
39		Lever Holder PBD 1553	1	
40		Not Use		
41	0002332	Flywheel Spring PBE 13864	1	
42	0002333	Polyethylene Washer PBE 13880	1	
43	0002582	Flywheel PBD 1552	1	
44		Flywheel Holder Ass'y PBE 01254	1	
45	0002596	Stop, Eject Lever PBD 1452	1	
46	0002279	Spring PBE 13650	1	
47	0002597	Pause Lever PBD 1453	1	
48		Pause Collar PBE 13849	1	
49		Lock Plate PBD 1442	1	

Ref. No.	Stock No.	Description	Q'ty	Remarks
50	0002283	Lock Plate Spring PBE 13647	1	
51	0002604	Leaf Switch MSW-1105	1	
52		Clutch Arm Ass'y PBD 0615	1	
53		Spring PBE 14046	1	
54		Twist Spring PBE 14277	1	
55	0002339	Motor Rubber PBE 13360	3	
56	0002271	Motor Collar PBE 13394	3	
57	0002288	Idler Arm Ass'y PBE 01055	1	
58	2465093	Latch Lever R78149-046	1	
59	0002289	Spring PBE 13662	1	
60	0002286	Stop Lever PBD 1435	1	
61		Operation Plate Ass'y PBD 0525	1	
62	0002287	Spring PBE 13863	1	
63		Motor Bracket PBE 14204	1	
64		Review Sub Plate PBE 13867	1	
65		Spring PBE 14024	1	
66		Release Lever PBD 1474	1	
67		Release Lever Spring PBE 14004	1	
68		Auto-stopper Ass'y PBD 0552	1	
69		Auto-Stopper Belt PBE 14033	1	
70		Sensor PBD 1516	1	
71		Washer PBE 14117	1	
72		Pause Spring PBE 13968	1	
73		Not Use		
74		FF Lever Spring PBE 6001	1	
75		Play Lever Spring PBE 6002	1	
76		PS Washer PBE 01129	1	
101		BHT Screw 2X8	3	
102		+ — Screw 2X12	1	
103		Grommet 2.4X6X0.2	1	
104	0002318	CS Ring CS-5	3	
105	0002305	Washer 5.2X10X0.5	3	
106	0002317	CS Ring CS-4	2	
107	0002308	Mylar Washer 1.6X4X0.2	2	
108	0002315	CS Ring CS-2	3	
109	0002303	Mylar Washer 2.2X5X0.2	1	
110		PHT Screw 3X5	4	
111		FC Screw 3X5	2	
112	3721006	E Ring E-4	2	
113	0002316	CS Ring CS-3	4	
114		PHS Screw 2.6X4	2	
115	0002324	PH Screw 2.6X3	2	
116	0002319	WFT Screw 2.6X6	1	
117		WFT Screw 3X6	2	
118		WFT Screw 2.6X6	3	
119		PHT Screw 2.6X5	1	
120		PHT Screw 2.6X10	2	

5. CHASSIS ASS'Y

Ref. No.	Stock No.	Description	Q'ty	Remarks
5-1	9253232	Main Chassis Ass'y	1	
5-2	9253273	Dial Cord Ass'y	1	
5-3	9259150	Tuner Board Ass'y	1	TP Ass'y 9259157
5-4	9259152	Amp Board Ass'y	1	TP Ass'y 9259158
5-5	9258076	Level Meter Ass'y	1	
5-6	7310192	Tuning, Frequency Meter (FM)	1	9258077
5-7	2335331	Shield Plate-1 R79066-019	1	
5-8	2485124	Dial Pulley R78155-010	1	
5-9	2675074	Cushion R7877-053	2	Mic
5-10	2675120	Cushion R78149-052	1	20X20X16 DF
5-11	2675122	Packing-4 R78149-054	1	9X15X2 DF
5-12	7320136	Condenser Microphone AM-MC-136	1	ECM (L ch) 150 mm
5-13	7320142	Condenser Microphone AM-MC-142	1	ECM (R ch) 700 mm
5-20	3615069	PHDT Screw 3X8 S/Z	8	

Ref. No.	Stock No.	Description		Q'ty	Remarks
5-21	3615083	WFDT Screw	3X10 S/Z	2	
5-22	3618032	PW Screw	2.6X8 S/Z	1	

5-1. MAIN CHASSIS ASS'Y

Ref. No.	Stock No.	Description		Q'ty	Remarks
5-1-1	2115172	Main Chassis	R78149-003	1	
5-1-2	2415130	Dial Shaft	K-DS-7902	1	
5-1-3	2444007	Pulley	P262-204A	6	
5-1-4	2444012	Pulley	R7708-051	1	
5-1-5	3630016	PS Washer	6.2X9.5X0.25	1	
5-1-6	3630087	PS Washer	2.8X7X0.5	7	
5-1-7	3635182	Washer	R78148-039	1	Dial Shaft

5-2. DIAL CORD ASS'Y

Ref. No.	Stock No.	Description		Q'ty	Remarks
5-2-1	3790002	Grommet	2X3 B/NI	1	
5-2-2	3815092	Spring	R77124-045A	1	
5-2-3	5110160	Dial Cord	0.3φX1650 mm	1	

5-3. TUNER BOARD ASS'Y

Ref. No.	Stock No.	Description		Q'ty	Remarks
5-3-1	7121603	Tuner PC Board	AM-B-1603	1	
5-3-2	7540149	FM Front End Unit	AM-UF-149	1	
	7200087	IC	BA1320	1	IC2
	7200140	IC	ZTK-11	1	IC3 (11 V)
	8110064	IC	HA11211	1	IC1
	8113059	Transistor	2SC460B	2	Q4, 5
	8113328	Transistor	2SC711G	4	Q1, 2, 6, 7
	8114057	Transistor	2SD355E	1	Q3
	8120264	Diode (LED)	SLD-30UR	1	D13
	8120295	Diode (Zener)	MZL-306C	1	D8
	8120322	Diode	SR1K-2LF	1	D1
	8120331	Diode (Zener)	MZL-309A	1	D2
	8120332	Diode (Zener)	MZL-314A	1	D14
	8121014	Diode	1N60	3	D4, 5, 6
	8131019	Varistor	1S1588	6	D3, 7, 9, 10, 11, 12
	2145017	Antenna Holder	R7538-013	2	
	2275087	PC Board Bracket	R79066-022	1	
	7230458	Balun	AM-LA-458	1	L1
	7230545	Antenna Coil	AM-LA-545	1	L10 (SW_2)
	7230584	Bar Antenna Coil	AM-LA-584	1	L11 (SW_1), L12 (MW)
	7250511	IFT	AM-LI-511	1	IFT4 (AM)
	7250528	IFT	AM-LI-528	2	IFT2, 3 (AM)
	7250639	IFT	AM-LI-639	1	IFT1 (FM)
	7270435	OSC Coil	AM-LO-435	1	L9 (MW)
	7270467	OSC Coil	AM-LO-467	1	L8 (SW_1)
	7270468	OSC Coil	AM-LO-468	1	L7 (SW_2)
	7270511	OSC Coil	AM-LO-511	1	L2 (DC Converter)
	7290274	Choke Coil	AM-LS-274	2	L5, 6
	7290509	Phase Coil	AM-LS-509	1	L4
	7290541	Choke Coil	AM-LS-541	1	L3
	7460684	Slide Switch	AM-S-684	2	S13, 14
	7460834	Push Switch	AM-S-834	1	S1~6
	7460835	Push Switch	AM-S-835	1	S7~11, 107
	7560269	Trimmer Condenser	AM-VC-269	1	TC3, 6 (MW)
	7560308	Variable Condenser W/VR	AM-VC-308	1	VR5(FM),VC(AM),TC1,2,4,5
	7580941	Fine Volume	AM-VR-941	4	VR1~4 (Preset)
	7640089	Ceramic Filter	AM-X-89	1	CF1 (10.7 MHz)
	7710176	Mini Octal Din	AM-Z-176	2	
	7710298	Flat Cable (5 Leads)	AM-Z-298	1	

Ref. No.	Stock No.	Description	Q'ty	Remarks
	7710299	Flat Cable (6 Leads) AM-Z-299	1	
	7710301	Antenna Board AM-Z-301	1	
	8914103	Semi-fixed Resistor 10kΩ-B	2	VR7, 9
	8914201	Semi-fixed Resistor 200Ω-B	1	VR8
	8914202	Semi-fixed Resistor 2kΩ-B	1	VR10
	8914203	Semi-fixed Resistor 20kΩ-B	1	VR6
	7710311	Ferrite Bead Core AM-Z-311	1	Q4 Emitter
	2675020	Packing N6 DF	1	10X20 BK
	2675129	Cushion R79066-029	1	12X12X12 DF
	3100185	WF Screw 3X6 S/Z	3	

5-4. AMP BOARD ASS'Y

Ref. No.	Stock No.	Description	Q'ty	Remarks
5-4-1	7121562	AMP PC Board AM-B-1562	1	
	7200107	IC NE646B	2	IC6, 7 (Dolby NR)
	7200126	IC BA328	2	IC4, 5
	7200139	IC AN7158	1	IC8
	8113323	Transistor 2SC1312G	12	Q101, 201, 106, 206, 110, 210, 111, 211, 112, 212, 113, 213,
	8113328	Transistor 2SC711G	12	Q103, 203, 104, 204, 105, 205, 108, 208, 109, 209, 301, 302
	8113335	Transistor 2SC710D	2	Q102, 202
	8114057	Transistor 2SD355E	1	Q305
	8114101	Transistor 2SD361D	2	Q303, 304
	8120264	Diode (LED) SLD-30UR	3	D301, 302, 303
	8120303	Diode (Zener) MZL-314C	1	D304
	8120322	Diode SR1K-2LF	2	D101, 201
	8120330	Diode (Zener) MZL-310C	1	D305
	8121002	Diode 1N34A	6	D104, 204, 105, 205, 107, 207
	8131019	Varistor 1S1588	6	D102, 202, 103, 203, 106, 206
	7210123	US Jack AM-J-123	4	J3, 4, 7, 8
	7210127	US Jack AM-J-127	1	J11 (Remote SW)
	7210128	US Jack AM-J-128	2	(AUX)
	7210130	Headphone Jack AM-J-130	1	J9
	7210141	2P Pin Jack AM-J-141	1	J1, 2 (Phono)
	7270517	OSC Coil AM-LO-517	1	L301 (Bias)
	7290026	Choke Coil AM-LS-26	1	L13
	7290420	Choke Coil AM-LS-420	2	L103, 203
	7290540	Choke Coil AM-LS-540	2	L101, 201
	7440364	Lamp EQL-Z-064	1	LA301
	7460686	Lever Switch AM-S-686	1	S105 (Function)
	7460687	Lever Switch AM-S-687	2	S102, 103 (Dolby, Mode)
	7460798	Slide Switch AM-S-798	1	S101 (Rec-P. B.)
	7460799	Lever Switch AM-S-799	1	S106 (Loudness)
	7460827	Lever Switch AM-S-827	1	S104 (Tape Select)
	7580953	Variable Resistor 50kΩ-B AM-VR-953	1	VR303A, B (Volume)
	7580954	Variable Resistor 50kΩ-B AM-VR-954	1	VR304 (Balance)
	7580955	Variable Resistor 50kΩ-A AM-VR-955	1	VR301A, B (Rec)
	7580956	Variable Resistor 100kΩ-A AM-VR-956	1	VR305A, B (Bass)
	7580957	Variable Resistor 200kΩ-A AM-VR-957	1	VR306A, B (Treble)
	7610082	Low Pass Filter Unit AM-W-82	2	LPF1, 2
	7710282	Flat Cable (7 Leads) AM-Z-282	1	
	7740358	4P Plug AM-ZE-358	1	SP
	8914102	Semi-fixed Resistor 1kΩ-B	3	VR102, 202, 302
	8914103	Semi-fixed Resistor 10kΩ-B	4	VR101, 201, 103, 203
	8914104	Semi-fixed Resistor 100kΩ-B	2	VR104, 204
	3111308	PH Screw 3X8 S/Z	1	Q304
	3111115	PHT Screw 3X10 S/Z	4	Heat sink
	3510023	Hexagon Nut 3 S/Z	1	Q304
	3615077	FCDT Screw 3X8 S/Z	2	Power IC
		— CAPACITORS —		
	5511020	Ceramic 2pF 50V C SL	4	C56, 59, 60, 61
	5511050	Ceramic 5pF 50V C SL	1	C64
	5512060	Ceramic 6pF 50V D SL	1	C57
	5512070	Ceramic 7pF 50V D SL	1	C58

Ref. No.	Stock No.	Description					Q'ty	Remarks
	5512080	Ceramic	8pF	50V	D	SL	1	C55
	5512090	Ceramic	9pF	50V	D	SL	2	C120, 220
	5545102	Ceramic	0.001μF	50V	K	B	4	C123, 223, 130, 230
	5545152	Ceramic	0.0015μF	50V	K	B	4	C135, 235, 165, 265
	5545222	Ceramic	0.0022μF	50V	K	B	1	C72
	5714100	Electrolytic	10μF	25V	M		1	C314
	7140185	Electrolytic	3300μF	25V	M		1	C315
	7140190	Electrolytic	0.1μF	50V	M		2	C133, 233
	7140191	Electrolytic	0.22μF	50V	M		2	C141, 241
	7140192	Electrolytic	0.33μF	50V	M		2	C134, 234
	8663065	Styrol	4700pF	50V	J		2	C126, 226
	8663069	Styrol	5600pF	50V	J		3	C52, 128, 228
	8683025	Styrol	2700pF	125V	J		1	C330
	8700322	Ceramic	270pF	500V	J		1	C320
	8800051	Mylar	0.001μF	100V	K	FS	1	C319
		— RESISTORS —						
	7450151	Fuse	4.7Ω	1/4W	J		1	R329
	7450153	Fuse	15Ω	1/4W	J	SR	1	R12 (AM-RS-153)
	7450159	Fuse	33Ω	1/4W	J		1	R308
	7450171	Fuse	22Ω	1/4W	J		1	R323
	7450179	Fuse	2.2Ω	1/2W	J		2	R186, 286
	7450228	Fuse	10Ω	1/2W	J		1	R331
	8234222	Solid	220Ω	1/2W	K		2	R190, 290
	8910190	Metal Film	39Ω	1W	J	L	1	R321

5-5. LEVEL METER ASS'Y

Ref. No.	Stock No.	Description		Q'ty	Remarks
5-5-1	2675092	Cushion	R78149-041	2	
5-5-2	7310196	Meter	AM-M-196	1	M101 (L ch)
5-5-3	7310197	Meter	AM-M-197	1	M201 (R ch)

6. BATTERY LID ASS'Y

Ref. No.	Stock No.	Description		Q'ty	Remarks
6-1	1655131	Battery Lid	R78149-004 (RO)	1	
6-2	2645063	Cushion	R78149-040	1	

7. INSTRUCTION BOOK ASS'Y

Ref. No.	Stock No.	Description		Q'ty	Remarks
7-1	1245275	Tuning Rod	R7753-030 (RO)	1	Preset
7-2	4215912	Instruction Book	R-768A	1	
7-3	4491108	Polyethylene Bag	200X300X0.04	1	A-08
7-4	7340316	Cassette Tape	AM-N-316	1	

8. CARTON BOX ASS'Y

Ref. No.	Stock No.	Description		Q'ty	Remarks
8-1	4416383	Carton Box	ZPK-A6383	1	
8-2	4426158	Cushion-1	ZPK-B6158	1	
8-3	4426159	Cushion-2	ZPK-B6159	1	

REPLACEMENT PARTS LIST (2)

CSC-980L (E), (UK), (GE), (FR)

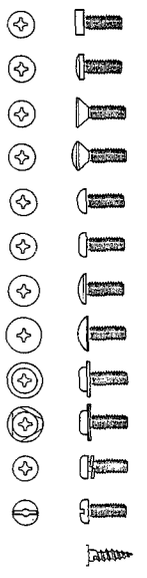
NOTE: The parts not listed should be referred to the parts list for the standard model CSC-980F (X).

Ref. No.	Stock No.	Description	Q'ty	Remarks
		– MAIN COMPONENT PARTS –		
1	9253581	AC Cord Ass'y	1	(E) (FR)
	9254811	*	1	(UK)
	9253581	*	1	(GE)
2	9258011	Front Cabinet Ass'y	1	(E) (FR)
	*	*	1	(UK)
	*	*	1	(GE)
3	9258012	Rear Cabinet Ass'y	1	(E)
	9258912	*	1	(UK)
	9259512	*	1	(GE)
	9259812	*	1	(FR)
7	9258078	Instruction Book Ass'y	1	(E)
	9258978	*	1	(UK)
	9259578	*	1	(GE)
	9259878	*	1	(FR)
8	9258090	Carton Box Ass'y	1	(E) (FR)
	9258990	*	1	(UK)
	9259590	*		(GE)
17	1485381	Dial Scale R79066-011 (I)	1	(E) (FR)
	1485395	* R80004-002 (I)	1	(UK)
	1485381	* R79066-011 (I)	1	(GE)
21	4491210	Polyethylene Bag-B 800X550X0.04	1	(E) (FR)
		* Bag-D-25 800X550X0.07	1	(UK)
	4491210	* -B *	1	(GE)
22	7710309	Jack Plate Unit AM-Z-309	1	(E) (FR)
	*	* *	1	(UK)
	*	* *	1	(GE)
1		– AC CORD ASS'Y –		
1-2	7660195	AC Cord AM-YS-195	1	(E) (FR)
	7660197	* AM-YS-197	1	(UK)
	7660195	* AM-YS-195	1	(GE)
2		– FRONT CABINET ASS'Y –		
2-11	1445219	Brand Plate R79066-014 (I)	1	(E) (FR)
	*	* *	1	(UK)
	*	* *	1	(GE)
3		– REAR CABINET ASS'Y		
3-1	9258053	Power Supply Ass'y	1	(E) (FR)
	9258953	*	1	(UK)
	9258053	*	1	(GE)
3-1-3	7121567	Power Supply Board AM-B-1567		
3-1-4	7150087	Fuse Holder AM-D-87	2	
3-1-5	7150102	Fuse AM-D-102	1	1.6A
3-1-7	7460826	Power Switch AM-S-826	1	S109
3-1-8	7530820	Power Transformer AM-TS-820	1	T1 (E) 220V (FR)
	7530822	* AM-TS-722	1	T1 (UK) 240V
	7530820	* AM-TS-820	1	T1 (GE) 220V
3-1-9	7710258	AC Socket Cover AM-Z-258	1	
3-1-12		Not Use		
3-1-13		Not Use		
3-2	9258075	Top Plate Ass'y	1	(E) (FR)
	9258975	*	1	(UK)
	9258075	*	1	(GE)
3-2-1	1445221	Top Plate R79066-010 (I)	1	(E) (FR)
	1445241	* R80004-003 (I)	1	(UK)

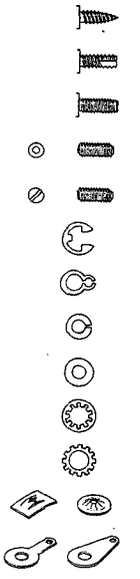
Ref. No.	Stock No.	Description	Q'ty	Remarks
3-2-1	1445221	Top Plate R79066-010 (I)	1	(GE)
3-8	1415841	Name Plate R79066-025 (I)	1	(E)
	1415862	* R80004-001 (I)	1	(UK)
	1415864	* R80031-001 (I)	1	(GE)
	1415867	* R80037-001 (I)	1	(FR)
3-9	1615358	Rear Cabinet R79056-001 (RO)	1	
5		– CHASSIS ASS'Y –		
5-3	9258050	Tuner PC Board Ass'y	1	TP Ass'y 9258058
5-3-1	7121567	Tuner PC Board AM-B-1567	1	
	7230537	Antenna Coil AM-LA-537	1	L10 (SW)
	7230590	Bar Antenna Coil AM-LA-590	1	L11 (MW), L12 (LW)
	7270408	OSC Coil AM-LO-408	1	L7 (SW)
	7270435	OSC Coil AM-LO-435	1	L8 (MW)
	7270436	OSC Coil AM-LO-436	1	L9 (LW)
	7560270	Trimmer Condenser AM-VC-270	1	TC3, 6 (LW)
	7710295	Antenna Socket AM-Z-295	1	
	7710301	Antenna Board AM-Z-300	1	
5-4	9258052	Amp PC Board Ass'y	1	TP Ass'y 9258059
	7210104	5P DIN Jack AM-J-104	1	J12
	8113328	Transistor 2SC711G	14	Q501, 502
	5511040	Ceramic 4pF 50V C SL	2	C55, 56
	7450153	Fuse Resistor 15Ω 1/4W J SR	1	R12
7		– INSTRUCTION BOOK ASS'Y –		
7-2	4215892	Instruction Book R-769A	1	(E) (UK) (FR)
	4215928	* R-794A	1	(GE)
7-3	4491108	Polyethylene Bag A-08 200X300X0.04	1	(E) (FR)
	4491408	* D-08 *	1	(UK)
	4491108	* A-08 *	1	(GE)
8		– CARTON BOX ASS'Y		
8-1	4416362	Carton Box ZPK-A6362	1	(E)
	4416384	* ZPK-A6384	1	(UK)
	4416400	* ZPK-A6400	1	(GE)
	4416362	* ZPK-A6362	1	(FR)

HARDWARE NOMENCLATURE

FH (**F**lat Fillister **H**ead) Screw
OH (**O**val Fillister **H**ead) Screw
FC (**F**lat **C**ountersunk Head) Screw
OC (**O**val **C**ountersunk Head) Screw
RH (**R**ound **H**ead) Screw
PH (**P**an **H**ead) Screw
BH (**B**inding **H**ead) Screw
TH (**T**russ **H**ead) Screw
WF (**W**asher **F**aced Head) Screw
PW (**P**oly-**W**ave) Screw
--S (--**S**EMS) Screw
--H (--**H**IOS) Screw
--W (--**W**ood) Screw



--T (--**T**apping) Screw A
--T (--**T**apping) Screw B
--DT (--**DT** Tapping) Screw
HS (**H**exagon **S**ocket Head) Screw
SS (**S**lotted **S**ocket Head) Screw
E Ring
G Ring
Spring Washer
Washer (Poly-slider)
TL (**T**oothed **L**ock) Washer I
TL (**T**oothed **L**ock) Washer E
Lock Washer
Lug Terminal



EXAMPLE: WFT Screw **A3** (D) × **10** (L)

YOUR COUNTRY

F (X) ..... **AFRICA**
CENTRAL, SOUTH (LATIN) AMERICA
MIDDLE, NEAR EAST ASIA
L (E)..... **WESTERN EUROPE**
L (UK) ..... **THE UNITED KINGDOM**
L (GE) ..... **WEST GERMANY**
L (FR)..... **FRANCE**